CONSTRUCTION NEWS

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RAILWAYS.

(*denotes *this this work is advertised in Engineering News.*)

ALABAMA.—In regard to the proposed elimination of grade crossings in Birmingham, Ala., officially noted last week, E. M. Durham, Jr., Prin. Asst. Engr., Southern Ry. Co., Birmingham, advises us that "this matter has not yet reached a stage where any definite information can be given you. Railroads have suggested several plans to the city of Birmingham, but none of them, so far, has been acted upon. In my opinion, it is probable that some plan will be adopted during the coming Summer and work instituted very shortly thereafter."

The Cullman Coal & Coke Co., Cullman, Ala., according to "The Manufacturers' Record," contemplates issuing $750,000 of bonds at a meeting on June 21, and will use the proceeds to complete its railroad.

ALTUS, LUBBOCK & ROSWELL.—According to the statement of Edward Kennedy, Altus, Okla., Pres. of the Altus, Lubbock & Roswell R. R. Co., the proposed new line from Oklahoma City to Roswell, N. Mex., is assured, the work of grading and laying steel having already begun at the Oklahoma end. This road will be 386 miles in length. At present 170 miles have been graded and another 40 miles have been taken over by the Wichita Falls & Northwestern R. R. Co., this 40 miles being the section from Altus to Hollis, Okla. The contract for the construction of the new line has been awarded to the TEXAS CONSTRUCTION CO., of Houston, Tex., and town sites along the proposed road will also be taken over by this company for development. In Texas the line will start at Memphis, Hall County, and will run through Briscoe, Floydada, Lubbock, Cochran and Lamb Counties. About $700,000 in bonuses have been raised by citizens along the proposed line, it is said. Noted on Feb. 3, under the old title of Altus, Roswell & El Paso.

ALTUS, ROSWELL & EL PASO.—See Altus, Lubbock & Roswell.

ARIZONA EASTERN.—We are officially advised that the SHATTUCK-EDINGER CO., 109 Sixth St., Los Angeles, Cal., has contract for building this line from Phoenix, Ariz., westward, a distance of 40 miles. Work is now under way. Contract calls for completion of the contract, to Hassayampa Creek, 40 miles, by Aug. 1. Surveys are made and right-of-way and capital secured. L. H. Long is Ch. Engr., Tucson, Ariz. Noted on Feb. 24.

ARKANSAS, LOUISIANA & GULF.—Company has applied for a charter for its proposed extension from Pine Bluff to Hazen, Ark., 50 miles. J. M. Parker, of Hamburg, Ark., is Gen. Mgr. Noted on April 28.

CANADIAN NORTHERN.—Company will soon call for bids, according to reports from Vancouver, B. C., for the construction of the first 60 miles of its line in British Columbia, eastward from Port Mann, opposite New Westminster, on the Fraser River. Noted on April 21.

DELAWARE, LACKAWANNA & WESTERN.—The Town Council of Bloomfield, N. J., has under consideration the plan to abolish grade-crossings on the D., L. & W. R. R. Co. Contract forms and ordinances will be reported, and if adopted, will be submitted to the citizens. When these matters are settled, the outlook for an elevated line and double tracking between Bloomfield and Montclair, with other imperative improvements, will be more encouraging, but much more remains to be done, especially at Glen Ridge and Montclair, before all the work can be undertaken. It is stated officially for the railroad company, according to the New York "Commercial," that "a tentative agreement has been made which, if ratified by the Bloomfield Council and the Board of Managers of the railroad company, will lead to a large expenditure at Bloomfield, but no such enormous sum as $3,000,000, as has been reported, and which would come nearer to covering what is contemplated for the future beyond Bloomfield to Montclair." Noted on Jan. 20. A. J. Neafie is Prin. Asst. Engr., Hoboken, N. J.

ELGIN, JOLIET & EASTERN.—We are officially advised that this company is now double-tracking from Matteson to Frankfort, Ill., and from Griffith to Ivanhoe Sand Pit, Ind. JONES BROS., of Columbus, Ohio, have contract for grading between Frankfort and Matteson, and A. F. HARTIGAN, of Gary, Ind., has the contract for grading between Griffith and Ivanhoe. The NEWKIRK & POWERS CONSTRUCTION CO., of Joliet, Ill., has the contract for the masonry work on both of the above jobs.

Company is building short sections of double track through Hartsdale, Ind., and Dyer, Ind.

Contract will be let in a few days for 17-stall reinforced concrete roundhouse at East Joliet, and in a few days bids will be asked for on the construction of a 15-stall reinforced concrete roundhouse at Waukegan. Later bids will be asked for on a 6-stall reinforced concrete engine house at the Illinois Steel Co.'s plant, Joliet, and a 1-stall reinforced concrete engine house at the plant of the Indiana Steel Co., Gary. Contract for coal chute at Gary has been let to the OTTO GAS ENGINE WORKS, of Chicago.

Bids will be asked for in a short time for coaling stations at East Joliet and Waukegan, Ill. Arthur Montzheimer is Ch. Engr., Joliet, Ill. Noted on April 28.

ESQUIMALT & NANAIMO.—Contract for clearing the right-of-way over the 20-mile extension of the Esquimalt & Nanaimo Ry., which is operated by the Canadian Pacific Ry., to be built from Wellington to Union Bay, has been awarded to SABIN & STEVENS, of Victoria, B. C. H. J. Cambie is Ch. Engr., Victoria.

GAINESVILLE, OKLAHOMA & WESTERN.—F. B. Truax, Ch. Engr., Gainesville, Tex., informs us that the company will let contracts for 20 miles of railway as soon as bids are received. The line will run from Gainesville to Bridgeport, Tex., 56 miles. Jos. Whaley is Pres., Gainesville. Surveys have been made for distance of 20 miles and capital obtained. Right-of-way has not been secured. Noted last week.

GRANT R. R.—This company has been organized and has filed articles of incorporation in Wisconsin to build a 29-mile railroad to connect Fennimore and Bagley, in Grant County, in the Southwestern lead mining district of Wisconsin. The capital stock is $25,000. W. E. Lewis, George Monroe and J. F. Morse are stockholders, Fennimore, Wis.

IBERIA, ST. MARY & EASTERN.—We are officially advised that construction contracts probably will be let in 60 days, for the section between New Iberia and Morgan City, La., 52 miles. This railroad will be built eventually to connect New Iberia, Jeanette, Franklin, Morgan City and New Orleans. Surveys are made and right-of-way is being secured for the New Iberia-Morgan City line. F. M. Welch is Pres., and H. A. Genung is Ch. Engr., New Iberia, La. Noted fully on Oct. 28, 1909.

MEMPHIS, DALLAS & GULF.—At the recent annual meeting of the stockholders of the Memphis, Paris & Gulf Ry. Co. the name was changed to Memphis, Dallas & Gulf Ry. Co. Capital stock was increased to cover cost of building and equipping 351 miles of road at a rate of $25,000 per mile, including bridges, etc., and the line of road now built, amounting to more than $7,000,000 in the aggregate. The Board of Directors was increased from seven to nine and Peter Byrd, of Pine Bluff, Ark.; J. W. Allen, of De Witt, Ark.; and T. C. Hornor, of Helena, Ark., added to the directorate. Noted on April 14.

MEMPHIS, PARIS & GULF.—See Memphis, Dallas & Gulf.

MEXICO NORTHWESTERN.—An extension to Agiabampo, State of Sonora, is proposed. B. H. Bryant is Ch. Engr., Casas Grandes, Chihuahua, Mex.

NEW YORK CENTRAL & HUDSON RIVER R. R.—The company, according to the New York "Commercial," of June 3, "has decided to suspend a $5,000,000 project for improving its system and has requested the cancellation of a $3,000,000 order for cars on account of the injunction granted to the Attorney-General by Judge Dyer in Missouri restraining railroads from increasing their rates. In making this announcement last night, W. C. Brown, Pres. of the New York Central Lines, declared that his road was unable to go ahead with its plans until there is some settlement of the suit filed by the Government, because he believed that the credit of American railroads had been totally destroyed by this move against them. The request for the cancellation of the order which called for 3,000 freight cars at the rate of $1,000 apiece, was received in Pittsburg yesterday. It was sent by Mr. Brown to three concerns, the Pressed Steel Car Co., the Standard Steel Car Co., and the American Car & Foundry Co. The order has been sent in some time before the suit in Hannibal, Mo., was instituted."

NORTHERN PACIFIC.—An extension will be built from Grandview, Wash., on the Sunnyside branch, to a point on the main line near Gibbon, below Prosser. Right-of-way is being secured. W. L. Darling is Ch. Engr., St. Paul, Minn.

PACIFIC & IDAHO NORTHERN.—It is proposed to build an extension from Weiser, Idaho, to Evergreen, a distance of 76 miles. E. M. Heigho is Pres. and Gen. Mgr., Weiser; Samuel Norris, 42 Broadway, New York, is Vice-Pres. and Gen. Counsel.

PHOENIX & BUCKEYE.—See Arizona Eastern.

ROME & NORTHERN.—It is officially announced that an extension will be built from Gore to Tunnel Hill, Ga., 33 miles, as noted on March 24. H. M. Smith is Ch. Engr., Rome, Ga.

SOUTHERN NEW ENGLAND RY.—Survey has been made by the engineers of the Grand Trunk Ry. Co. for the proposed connecting line across the southwestern part of Massachusetts. Estimated cost of construction is about $3,500,000. With this estimate as a basis the Grand Trunk Ry. Co., according to the Boston "Transcript," has formed the requisite agreement of association, calling its proposed Massachusetts line the Southern New England R. R. Co., has decided upon a capitalization of $1,000,000, divided into shares of $100 each, and has asked the Massachusetts Railroad Commission for a certificate of exigency which shall give it the right to cross the State. It has filed plans with the Massachusetts Railroad Commission showing precisely where it intends to go—the exact route from Palmer to the Rhode Island line—and on June 7 it will present its proposition at a public hearing before that Board. The question for the Board to determine will be whether public convenience and necessity require that this line shall be built, and this will be a large question, as interstate traffic has to be taken into consideration if any of the existing railroads should offer any opposition.

At Palmer the Grand Trunk, or Southern New England R. R., as the Massachusetts link will be called, will leave the New London Northern R. R., and take a course through Monson, Brimfield, Sturbridge, Dudley, Webster, Douglas, Uxbridge and Blackstone, a distance of a little over 58 miles. It is not a straight line, but one of easy grades and easy curves. From Palmer it will run to Brimfield Summit, through Brimfield, Fiskdale, Westville and Southbridge, crossing three streets in Southbridge; then through Sandersdale to Dudley Summit, six miles east of Sandersdale, then to Webster, crossing streets in that town overhead. From Webster the line would rise again to Mount Daniel Summit and descend to Douglas, Millville Heights, and finally to the line between Massachusetts and Rhode Island. The New York, New Haven & Hartford R. R. is crossed overhead a mile west of Douglas and again at a point about 2,000 ft. northwest of the State line.

The total cost of this line is estimated at a little over $3,500,000, as follows: Roadway, $192,380; clearing and grubbing, $16,031; bridging, $1,163,221; grading, $1,163,287; drains, $80,000; tracks, $536,789; farm crossings, signs and cattle guards, $2,610; fencing, $27,720; station buildings, etc., $26,000; telegraph lines, $17,433; signals, $1,000; water service, $9,000; track 2, $5,811; road division, $8,050; total construction, $3,133,312; engineering, legal and general expenses, 10 per cent., $313,331; interest on cost of construction, for six months (one-half time of construction), at 5 per cent., $86,166; total, $3,532,809. Noted on April 21.

WABASH.—Plans have been approved, it is stated, for 40 miles of new track between Montpelier, Ind., and Detroit, Mich. A. O. Cunningham is Ch. Engr., St. Louis, Mo.

WESTERN MARYLAND.—The CARTER CONSTRUCTION CO., of Pittsburg, has sublet contracts as follows: To the CONESTOGA CONTRACTING CO., House Bldg., Pittsburg, the contract for ten miles of construction of the extension from Cumberland, Md., to Connellsville, Pa. The section between Garrett and Markleton are important ones, as they involve considerable heavy masonry work. To FOLEY BROS. & CO., six miles of heavy sections on this extension between Markleton and Ohio Pyle, and to CONNOLLY & WOOD the masonry between Cumberland and the State line. Noted on May 12.

ELECTRIC RAILWAYS.

SYRACUSE, N. Y.—The Syracuse, Lake Shore & Northern R. R. Co. has commenced construction at Minetto on its 11-mile extension between Fulton and Oswego. The work is being done under the name of the ONTARIO CONSTRUCTION CO. Engineers employed by I. M. Luddington & Sons Co., of Rochester, are in charge.

BOLIVAR, N. Y.—The Southwestern New York Traction Co., Bolivar, has been granted a 50-year franchise to build a street railway in Bolivar. As officially noted on May 5, this company "will let construction contracts this Summer. The line will be about 15 miles long and will connect Bolivar and Wellsville. C. M. Van Curen is Pres.; A. J. Matson is Secy., Bolivar, N. Y." Noted fully on April 14.

BROOKLYN, N. Y.—The Brooklyn & Jamaica Bay Ry. Co., on June 2, filed articles of incorporation with the Secretary of State, at Albany. It is proposed to build and operate a street surface road from the intersection of Montauk and Liberty Aves., in Brooklyn, to a point at the mouth of Spring or Mill Creek, where it empties into Jamaica Bay, in Queens County, and also to a point on Jamaica Bay in Brooklyn, where Montauk Ave. would end if extended.

The length of the road is to be three miles. Capital stock, $100,000. The directors of the company are as follows: Horace J. Subers, of Ashbourne, Pa.; Nelson S. Easton, Daniel Von Wien, Edward S. Churchill, Marvin D. Hubbell and J. Douglass Wetmore, of New York City and Frederick B. Langston, John Woodenbury and Richard F. Sears, of Brooklyn.

SCRANTON, PA.—We are officially advised that the Scranton & Lake Ariel Ry. Co. has made surveys and secured part of necessary right-of-way for its proposed line from Scranton to Lake Ariel, 22 miles. Company was granted its charter on May 26. J. J. Brown is Pres., Scranton. Noted on May 19.

CHESTER, PA.—The Chester Traction Co. proposes to build an extension between Chester and Boothwyn, a distance of five miles. F. A. Tyson is Ch. Engr., Reading, Pa.

NEW CASTLE, PA.—The Select Council has passed the ordinance granting to the New Castle & Beaver Falls Street Ry. Co., a time extension in which to begin work on the road, of six months. Noted on March 31 and Feb. 10.

PHILADELPHIA, PA.—The Philadelphia & Suburban Elevated R. R. Co. has applied to the City Council for a franchise. S. S. Neff is Pres., 416 Franklin Bank Bldg., Philadelphia. Fully noted on Dec. 16, '09.

LYNCHBURG, VA.—The Lynchburg, Amherst & Northern Ry. Co. has been organized to build a railway from Lynchburg through Amherst County and into Nelson County. Preliminary survey will soon be started. H. L. Page is Pres., and J. T. Bonny, Secy. Fully noted on May 12.

CLARKSBURG, W. VA.—The Clarksburg & Weston Elec. Ry. Co. has awarded contract to RAMAGE, WOLFE & CO., of Fairmont, W. Va., for building a 7-mile section between Clarksburg and Byron, of its proposed line between Clarksburg and Weston, a distance of 24 miles. D. D. Britt is Ch. Engr., Clarksburg. Noted fully on May 26.

BIRMINGHAM, ALA.—The Birmingham & Edgewood Elec. Ry. Co. has awarded contract to FURTWANGER & SMITH, of Birmingham, for building its line. As noted on Aug. 5, '09, this company was incorporated "to build an electric railway from the southern terminus of the South Highlands line, through Rosedale and Edgewood, to a point one-half mile north of Shades Creek. Stephen Smith is Pres.; Geo. H. Harris is Vice-Pres., and G. T. Brazleton, Secy. and Treas. This company has completed preliminary arrangements and will soon award contracts. All necessary franchises and right-of-way have been secured. It will be about 3½ miles long. The Board of Revenue has appropriated $10,000 to be used in cutting through Red Mountain, according to plans that have been prepared by the company."

SUMMIT, MISS.—The Summit-McComb Motor Line Co. has been granted a franchise to build a railway within the corporate limits of Summit. This is part of a plan to connect Summit and McComb, and it will be about five miles long. J. E. Randall, Gulfport, Miss, is Engr.

HAMMOND, LA.—The Hammond Interurban Railway Co., recently organized, proposes to build five miles of railway, including a frame bridge, from Hammond to Genesee, via Natalbany, La., W. E. Libby is Pres.; B. H. Brooks, Vice-Pres.; T. W. Cate, Treas.; F. G. Bueler, Secy. Charter will be applied for.

COLUMBUS, OHIO.—The Fifth Ave. Ry. Co. has been organized to build a line on Fifth Ave., from Shepard to Arlington. A committee to secure the incorporation of the company was appointed as follows: Dr. A. C. Wolfe, E. W. Yantis, J. C. Fippin, Frank W. Jennings and William Cushing, Pres. of the Columbus Saw Mill Co. They were instructed to make the initial capital stock $10,000. The right-of-way committee consists of George Riddle, Sherman D. Brown, Guy H. Woodrow, J. S. Stolz, D. E. Sullivan, Henry Miller, Wilbur Dunham, B. D. Williamson, Edward B. Roberts and H. J. Gardner, 1183 North High St., Columbus.

CARTERVILLE, ILL.—The Egyptian Traction Co., Eldorado, Ill., has petitioned the Council for a franchise to build a railway in Carterville. Noted on April 21.

COLUMBUS, KAN.—We are officially informed that the Oklahoma & Kansas Ry. Co. is about to start surveys for its proposed electric line. This line will connect Columbus and Galena, Kan., with Baxter Springs, Kan. It will then extend south through Sunnyside, Lincolnville and Hattanville, Okla., to Miami, Okla. The W. K. Palmer Co., Dwight Bldg., Kansas City, Mo., has been retained as consulting engineer.

HASTINGS, NEB.—The City Council has informally approved a franchise for the Omaha, Western & Lincoln R. R. Co. The rights and privileges given in the franchise are limited to a period of 50 years and are for passenger and express traffic only. The company must pave between the rails whenever the streets used are paved. The road must be completed in five years and at the time of beginning construction in Hastings a bond of $10,000 must be given to guarantee completion and operation of the local line, or the restoration of the streets to their former condition. As noted on March 24, "the OSCEOLA CONSTRUCTION CO., of Lincoln, Neb., has been organized for the purpose of building the Omaha, Western & Lincoln R. R., which will extend from Omaha to Hastings, with a branch to Lincoln. The total length of the system will be 219 miles. Headquarters, 140 South 13th St., Lincoln. Frank E. Schaaf is Pres. and Mgr.; Charles Butler, Vice-Pres.; A. J. Schaaf, Secy.; A. P. Tilley, Treas.; W. H. Fuller is Ch. Engr."

MINERAL WELLS, TEX.—The Mineral Wells Electric Co. has been organized with a capital stock of $350,000. Its charter was recorded at Shreveport, La., but it is reported that its purpose is to construct and operate an interurban electric railway between Forth Worth and Mineral Wells, Tex. The officers of the company are: S. B. Cantey, of Fort Worth, Pres.; Newton C. Blanchard, of Shreveport, La., Vice-Pres.; W. C. Forbes, of Fort Worth, Secy.

HOUSTON, TEX.—We are officially advised that the Houston & Bay Shore Traction Co. will build a line about 30 miles long, from Houston to La Porte, via Harrisburg and South Houston. Surveys are made and right-of-way and capital secured. Construction will be done by day labor. A. Foster Irwin is Pres., and J. G. Miller is Ch. Engr., both at Houston. Capital stock, $600,000. Company will build a power plant and car barn at La Porte to cost about $110,000 and a substation at South Houston. Noted on April 28.

FORT WORTH, TEX.—The Fort Worth Board of Trade has under consideration the proposition to raise $300,000 to aid in financing the construction of an interurban electric railway between that city and Cleburne, it is stated.

ST. LOUIS, MO.—It is announced that the St. Louis, Creve Coeur & Western Ry. Co. will commence construction soon on its proposed 14-mile railway, which will connect St. Louis, Mt. Olive, Olivette, Stratmann, Creve Coeur, Fern Ridge, and Creve Coeur Lake. Power will be purchased from the United Railways or the Union Electric Co. Capital stock authorized, $300,000. Issued, $300,000. Bonds authorized, $300,000. William F. Pfeister, Creve Coeur, Route 27.

is Pres.; Carl Feld, Clayton, Mo., Vice-Pres.; S. H. Werremeyer, Clayton, Secy., and Jacob Studt, Creve Coeur Lake, Treas.

GOLDEN, COLO.—We are officially advised that the Lookout Mountain Park Route Co. will let contracts this summer for building its line from Golden to Lookout Mountain, a distance of four miles. Surveys are made, capital is being secured and right-of-way has been obtained. R. C. Vidler is Pres., Golden; L. W. Vidler is Ch. Engr., 620 Empire Bldg., Denver. Noted on May 19.

SPOKANE, WASH.—Local press reports state that it has been announced by A. Hover of the Hover-Schiffner Co., Spokane, that $230,000 of the $400,000 needed for the construction of the proposed gasoline motor line from Spokane to the Newman Lake country has been subscribed. It is planned to build 18 miles of railroad to tap the fruit districts of Peone Prairie, Orchard Prairie and Green Bluffs, with terminal at Newman lake. Later the road will be turned over to one of the local traction companies to be electrified.

FOREST GROVE, ORE.—The United Railways Co., of Portland, will commence construction soon on the extension from Forest Grove to Tillamook. J. W. E. Taylor, Commonwealth Bldg., Portland, is Engr.

SPRINGFIELD, ORE.—City Council has granted a franchise to the Portland, Eugene & Eastern Ry. Co. to construct a street railway in that city, work on which is to begin in 30 days. James L. Lambirth is Ch. Engr., Eugene, Ore.

SAN JOSE, CAL.—The San Francisco, Oakland & San Jose Ry. Co. is reported to have completed surveys from Oakland to San Leandro and to have started surveys for an extension from San Leandro to San Jose. Headquarters have been established at Irvington and two parties sent out to run surveys, it is said, one to work south through the Warm Springs district toward San Jose, the other to work northwest from Irvington to Centreville. It is understood that lines will be run from Centreville toward San Leandro, both by way of Newark, Alvardo, Mt. Eden and Hayward, and also by way of Niles, Decoto and Hayward. W. F. Kelly is Gen. Mgr., 710 San Pablo Ave., Oakland. Noted on May 26.

GLENDALE, CAL.—The Glendale & Eagle Rock Ry. Co. may build an extension to Burbank if bonus of $40,000 is raised by citizens of Burbank. E. D. Goode is Pres. and Gen. Mgr., Glendale.

VANCOUVER, B. C.—The British Columbia Electric Ry. Co., Ltd., has awarded a contract to M. P. COTTON of Vancouver, for clearing and grading line and constructing roadbed ready for ballasting and tracklaying on the 7½-mile extension from Burnaby to Vancouver.

LIGHT AND POWER PLANTS.

(denotes that this work is advertised in Engineering News.)*

BOSTON, MASS.—Bids were received as follows on June 4, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the fire protection and heating systems for the extension of Building No. 62, at the navy yard, Boston: Leon D. Murray, Inc., 6 Beacon St., Boston, $2,498; John W. Danforth Co., 70 Ellicott Sq., Buffalo, $2,036; W. W. Campbell & Son, 60 Pearl St., Boston, $2,195; Smith Alden & Co., 6 Beacon St., Boston, $2,323.

*FORT ANDREWS (Boston post-office), MASS.—we are officially advised that bids were received at the office of Capt. A. M. Miller, Constructing Q. M., U. S. A., 263 Summer St., Boston, on June 6, for the construction of an electric lighting system at Fort Andrews, as follows: Lord Electric Co., New York, Item (1) $3,589, (2) $3,754, (3) $2,430, (4) $550; Alfred J. Hixon, Boston, Mass., (1) $4,143, (2) $5,925; Whitall Electric Co., Westerley, R. I., (1) $5,800, (2) $5,600, (3) $2,500, (4) $800; James Wilkinson & Co., Boston, Mass., (1) $3,135, (2) $4,509, (3) $2,431, (4) $1,425; Clark & Mills Electric Co., Boston, Mass., (1) $3,478, (2) $4,991, (3) $2,758, (4) $1,295; McCay Engineering Co., Baltimore, Md., (1) $4,054, (2) $8,950, (3) $2,685, (4) $990; Western Electric Co., Boston, Mass., (3) $1,259; General Electric Co., Boston, Mass., (3) $2,272; Westinghouse Electric & Mfg. Co., Baltimore, Md., (3) $2,380; John R. Bowker, (1) $3,685, (2) $4,848, (4) $1,441. Item No. 1, wiring certain buildings, repairing wiring in certain buildings, etc.; item No. 2, construction primary, secondary and street light lines, etc.; item No. 3, furnishing and delivering all watt meters, transformers, etc.; item No. 4, construction of brick building for substation.

PAWTUCKET, R. I.—We are officially advised that the Pawtucket Electric Co. has arranged with the STONE & WEBSTER ENGINEERING CORPORATION, 147 Milk St., Boston, Mass., for the enlargement of the South Power Station at Pawtucket. The engineering and construction contract calls for an additional 5,000-KW. turbine and two 520-HP. boilers. All boilers will be equipped with mechanical stokers and forced-draft apparatus. New coal handling apparatus, consisting of overhead bunkers, horizontal conveyer, coal crusher and elevator will also be installed. The present intake tunnel for condensing water will be completed and a new discharge tunnel will be constructed for the entire plant.

JEWETT CITY, CONN.—The Borough Council has awarded contract to the NASHAWAUG ELECTRIC POWER CO. for supplying electricity to operate the municipal electric light system for a term of ten years. The company is building a plant at Plainville and is erecting a high-tension transmission line from Plainville to Jewett City.

WATERBURY, CONN.—The Board of Public Works has approved the new contract for five years from March 1, 1910, with the CONNECTICUT CO., D. B. Neth, Supt., Waterbury, for street lighting, by which the city will save $4,000 per year. Under the new contract the price for arc lamps will be reduced from $87.50 to $79 each per year. Incandescent lamps will again be $20 each per year.

FULTON, N. Y.—Bids will be received by the City Clerk until June 17 for the purchase of a franchise for furnishing electricity.

NEW YORK, N. Y.—Bids were received as follows on June 6 by C. B. J. Snyder, Supt. School Bldgs., for installing electric equipment in new Public School 77, on southerly side of Covert Ave., between Centre and George Sts., Ridgewood Park, Borough of Queens: Griffin & Co., 150 Nassau St., New York, $13,413; T. F. Jackson, 94 John St., New York, $11,245; Cowden & De Young, 45 East 42d St., New York, $12,833; N. Y. Construction Co., 1328 Broadway, New York, $11,700; Commercial Construction Co., 24 State St., New York, $11,649; Reiss & O'Donovan, 207 East 37th St., New York, $13,480.

NEW CASTLE, PA.—The New Castle Electric Lighting Co. will expend about $300,000 for improvements to its lighting system at New Castle this year. J. A. Toler is Ch. Engr.

PHILADELPHIA, PA.—Philadelphia Rapid Transit Co. has awarded contract for a substation, 59 ft. by 32 ft., at Germantown Ave. and Erie Ave., to the CHARLES McCAUL CO.

BALTIMORE, MD.—Oscar L. Hattan, Mgr. Severn Realty Co., 111 North Charles St., Baltimore, has announced that a complete electric light and water system will be installed at Severna Park, on the Severn River, within the next few weeks.

*BALTIMORE, MD.—We are officially advised that the McCAY ENGINEERING CO., 9 East Lexington St., Baltimore, has been awarded contract by the city for Sanitary Contract 51, electrical and mechanical equipment for the sewage disposal works at Bach River, at $42,400. Bids were opened on May 11. Noted on May 19. Calvin G. Hendrick is Ch. Engr.

*WASHINGTON, D. C.—Bids are asked until noon, June 17, by the District Commissioners for 1-year and 3-year contracts for lighting the public streets, avenues, alleys and roads in the district.

WASHINGTON, D. C.—The Capital Traction Co. has purchased a tract of land at the corner of 32d and Water Sts., Georgetown, on which, it is reported, it will erect a new power-house.

BEDFORD CITY, VA.—Bids will be received until June 15 for the construction of power-house turbines, transmission line and electrical apparatus of the proposed hydro-electric plant, dam for which has been constructed. Estimated cost of work, including dam, $100,000. Francis R. Weller, of Washington, D. C., is Engr.

CREWE, VA.—Contract for installing an electric light plant here has been awarded to J. KENT WHITE, of Waynesboro, Va.

FORT CASWELL, N. C.—Bids are asked by Lieut. R. O. Edwards, Constructing Q. M., U. S. A., until 2.30 p. m., June 9, for wiring, with fixtures, two double sets of officers' quarters.

AUGUSTA, GA.—The Augusta Ry. & Electric Co. is contemplating the installation of a 1,000-KW. steam turbine, with necessary boilers, etc. John H. Adams is Ch. Engr.

DUBLIN, GA.—The city proposes to expend $10,000 for improvements to the light plant and water-works, including a new engina and dynamo.

GADSDEN, ALA.—Captain R. H. Cobb, of Anniston, Ala., has applied to the City Council for a franchise to erect transmission lines for the distribution of electricity in Anniston. He is interested in a project to construct a dam at lock No. 2 on the Coosa River, where it is expected to develop 25,000 HP., to be distributed here. Tentative contracts have been signed by the Southern Iron & Steel Co. for 12,000 HP., and with the Dwight Manufacturing Co. for 3,000 HP.

DELAWARE, OHIO.—Bids will be received by the Board of Trustees, Girls' Industrial Home, Delaware, until June 27, for completing the lighting and heating system. The specifications call for two additional engines and generators, 4,500 ft. of steam heating conduit, 10-in., 6-in. and 4-in. mains, with 4-in., 3-in. and 2-in. returns, and reinforced concrete coal storage pocket, reinforced concrete electric lamp standards, 30,000 ft. of underground cable, wiring, lamps and fixtures for twelve buildings. Plans and specifications are on file at the office of Harold M. Bush, Consulting Engr., 69 North Fourth St., Columbus Ohio. Amount of appropriation available, $70,000.

CRAWFORDSVILLE, IND.—J. W. Esterline, of La Fayette, Ind., has been engaged as consulting engineer to design and supervise the erection of a new power station for the Crawfordsville Electric Light & Power Co.

DETROIT, MICH.—The Dodge Bros. Co., of Detroit, Mich., are preparing to increase the output of its power plant, the equipment to include two engine-driven alternators with a rating of 1,200 KW., together with auxiliary machinery. It is understood that the contracts have been placed for the equipment.

The new plant of the Lozier Motor Co. in Detroit will be equipped for electric motor drive. Electricity for operating the works will be furnished by a 1,000-HP. electric power plant to be installed in connection with the new works.

STURGIS, MICH.—The City Council has awarded to the ALLIS-CHALMERS Co., of Milwaukee, Wis., contract for equipment for the proposed hydro-electric power plant to be erected on the St. Joseph River, at Lelands, where the city has secured options on a power site. The apparatus will include an 800-HP., single runner, vertical shaft turbine, designed to operate under a maximum head of 25 ft. The turbine will be direct connected to a 550-KVA., 2,300-volt, 3-phase, 60-cycle, 150 r.p.m. alternator, a 40-KW., direct-current generator driven by a 67-HP. vertical shaft turbine, for excitation purposes; six 200-KVA., 23,000-2,300-volt transformers at each end of the line, and a 3-panel switchboard. The plant will be located 23 miles from Sturgis, and a transmission line will be erected to transmit electricity generated at the plant to Sturgis.

PAULINA, IOWA.—Bids will be received until June 13 by David Algyer, Town Clk., for erecting an electric light and power plant.

OWATONNA, MINN.—A. L. Ober, of Chatfield, Minn., has applied to the City Council for an electric light franchise in Owatonna.

MINNEAPOLIS, MINN.—We are officially advised that the St. Croix Falls Improvement Co. has arranged with the STONE & WEBSTER ENGINEERING CORPORATION, 147 Milk St., Boston, Mass., for an increase in the capacity of the Taylor's Falls plant which supplies the city of Minneapolis. The present power station building will be extended to accommodate two new 2,500-KW. units with exciters and step-up transformers, increasing the total rated capacity of the installation to 15,000 KW. An additional transmission line 40 miles in length will be built to Minneapolis and transforming apparatus will be installed in a substation in the outskirts of the city.

HIAWATHA, KAN.—See item under Sewers.

COUNCIL GROVE, KAN.—Plans are being prepared by Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., for a municipal lighting plant.

BEATRICE, NEB.—See item under Water Supply-Irrigation.

CARRINGTON, N. DAK.—Bids opened by C. W. Burnham, County Audr., for ventilating and heating apparatus, plumbing and electric wiring and conduits for telephones for the new county court-house and jail have been rejected. New bids will be received until June 24. Buechner & Orth, 601-2 Manhattan Bldg., St. Paul, Minn., are Archts.

TYNDALL, S. DAK.—Bids are asked by the city until 7 p. m., June 15, for an electric light plant and water-works. Bids are asked on 40 and 45-KW. generators, gas producer plant for driving same, and 50,000-gallon concrete reservoir. Oscar Claussen, of St. Paul, Minn., is Engr.

TIPTON, MO.—On May 24 the proposition to issue $17,500 of bonds for the installation of an electric light and power plant was carried. Joseph Sommerhauser is City Clk.

WACO, TEX.—The City Commissioners contemplate calling an election to vote on the proposition of issuing bonds to construct a municipal electric light and power plant. The contract with the present lighting plant still has four years to run, but it is planned to have the new plant finished before that time if the proposition carries.

HOUSTON, TEX.—See item under Electric Railways.

KERSEY, COLO.—The Council has granted a franchise to W. F. Murphy, of Denver, Colo., representing Eastern capitalists, for constructing and operating an electric light plant and water-works system here.

WALLA WALLA, WASH.—The Columbia Light & Power Co., which lately took over the properties of the Northwestern Corporation at Walla Walla, will build a power line from North Yakima to Walla Walla, via Pendleton, using the power generated in the Yakima Valley plant.

VALLEJO, CAL.—The Board of Trustees has authorized the Board of Public Works to appoint an engineer to prepare estimates of the cost of an electric plant to supply electricity for lamps and motors here.

BODIE, CAL.—The Standard Consolidated Mining Co. has applied to the Board of Supervisors for a 30-year franchise to erect and maintain transmission lines along certain roads and highways in Mono County for the distribution of electricity for lamps and motors. Bids will be received by the Board of Supervisors until July 6. George Delury is County Clk.

REDONDO BEACH, CAL.—The ALBERGER CONDENSER CO., 140 Cedar St., New York, has secured contract for erecting a condensing apparatus at Redondo Beach for the Pacific Light & Power Corporation, at $34,950.

WHITTIER, CAL.—The Board of Trustees has decided to engage an engineer to make a report of the cost of erecting a plant to supply electricity and gas.

FORT MASON (San Francisco post-office), CAL.—Bids are asked by Maj. George McK. Williamson, Q. M., U. S. A., until 11 a. m., June 15, for installing a complete electric light system, including fixtures and substation at Presidio of San Francisco.

SAN FRANCISCO, CAL.—Only one bid was received by the Supervisors on May 23 for the contract for lighting the public buildings and streets, and it was referred to the Committee on Artifical Lights. The bid was from the San Francisco Gas & Electric Co., as follows: For furnishing gas to public buildings, offices, yards and public places, 60 cts. per 1,000 cu. ft.; for electric current for lighting purposes, 3 cts. per KW.-hour; for electric current for power purposes, 3 cents. per KW.-hour; for each arc lamp inside public buildings, or grounds adjacent thereto, when not connected with a metered service, 2½ cts. per lamp hour; for lighting streets and public places: For each single burner gas lamp, lighted all night, 6.528 cts. per lamp per night; for each gas triple lamp cluster, lighted until 12 o'clock, or all night, 5 cts. for each lamp of the cluster per lamp per night; for a single lamp of a triple lamp cluster used all night, where two lamps of the cluster are extinglished at midnight, 6.548 cts.; for each electric arc lamp, lighted all night, 19.727 cts. per lamp per night; for each electric arc lamp, lighted until midnight, 13½ cts. per lamp per night; for each electrolier of the type now in use in the downtown retail shopping district, lighted all night, 19.727 cts. per electrolier per night. It is understood that all single burner gas lamps and all triple cluster lamps not 12 o'clock shall be what is term[illegible] all-night every-night lamps, lighted upon [illegible] sunset-sunrise schedule for 365 nights [illegible] year. It is understood that all 12 o'clo[illegible] lights and 12 o'clock triple lamp clu[illegible] are to burn from the lighting time as [illegible] noted until after midnight. Deduction [illegible] lamps not burning shall be made at [illegible] rate as above stated.

TUCSON, ARIZ.—The plant [illegible] buildings of the Tucson Gas, Electric Ligh[illegible] Power Co. have been purchased by a [illegible]ndicate headed by Sanderson & Porter, [illegible] William St., New York, who, it is reporte[illegible] will enlarge the electric plant and stre[illegible] railway system.

DOUGLAS, ARIZ.—Phelps-Dodge [illegible] and other mining interests of this [illegible] are considering the proposition of join[illegible] forces in the erection of a large elect[illegible] power plant at Douglas. It is propos[illegible] construct transmission lines to the [illegible] and other mining districts. The power will also be used to operate an electric rai[illegible] that is to be constructed from the Tigre district to the town of Yzabel.

GUNNISON, UTAH.—The Gunnison Valley Power Co., Gunnison, will construct a plant here. Contract for the entire hydraulic and electrical equipment has been awarded to the ALLIS-CHALMERS CO., of Milwaukee, Wis. The turbine will be of 540 HP., operating under 221-ft. static head. Generation will be at 2,300 volts, and will be stepped up to 22,000 for transmission. The wiring materials and fixtures was awarded to the WESTERN ELECTRIC CO., 463 West St., New York. Estimated cost, $50,000. L. W Roush is Secy. and Engr.

LA TUQUE, QUE.—The city, it is reported, is contemplating the installation of a municipal electric light plant. Estimated cost, $50,000.

HAMILTON, ONT.—The Oliver Chilled Plow Works, of South Bend, Ind., is making plans for the construction of a new plant in Hamilton. All buildings will be of structural steel and concrete construction. A power house, 50 × 80 ft., and a boiler house of the same dimensions will be erected and an electric internal narrow gage railroad system will be installed. Estimated cost, $1,500,000. Prack & Perrine, of South Bend, Ind., are Consulting Engrs. Richard A. Smart, of South Bend, Ind., will have charge of the new plant.

RENFREW, ONT.—The ratepayers have voted to appropriate $117,000 to purchase water privileges and develop water-power on the Bonnechre River.

VANCOUVER, B. C.—Contract for furnishing and erecting complete lamp standards for the ornamental lighting system, to be installed on Hastings, Georgia and Cordova Sts. and Westminster Ave., has been awarded to the HINTON ELECTRIC CO., of Vancouver, at $46,908. The city has agreed to maintain the standards and furnish electricity for the lamps.

PRINCE RUPERT, B. C.—Contracts have been awarded by James Milne, Consulting Engr., for steam and electrical apparatus for the municipal electric light plants, as follows: For three return tubular boilers of 100 HP., pumps and piping to GOLDIE & McCULLOCH CO., of Galt, Ont.; surface condenser, circulating and air pumps, to the JOHN INGLIS CO., of Toronto, Ont.; two 175-KW. alternators and arc lamp equipment to the CANADIAN GENERAL ELECTRIC CO., of Toronto, Ont.; exciter and switchboard, to the CANADA WESTINGHOUSE CO., of Hamilton, Ont., two 15 × 25 × 16 cross compound Robb engines, to the ROBB ENGINEERING CO., of Amherst, N. S. Estimated total cost of the plant, $60,000.

CHIHUAHUA (Chihuahua), MEX.—The concession held by J. D. McKenzie for the construction of a gas generating plant and distributing system here has been declared forfeited by Governor Jose Maria Sanchez and a new concession granted to Martin Falomir.

SANTA ROSA (Chihuahua), MEX.—The Mexican Northern Power Co. estimates that its proposed hydro-electric plant and transmission lines in this state will cost about $7,000,000. Approximately $1,000,000 has already been spent in the necessary preliminary work.

MADERA (Chichuahua), MEX.—It is reported that Dr. F. S. Pearson and associates, owners of the Mexico Northwestern R. R., the Mexico Light & Power Co., and who are establishing large industrial enterprises in this part of Northern Mexico, will erect a large hydroelectric plant in this section for the purpose of providing power for their lumber mills and other manufacturing plants. The concessions which the Pearson interests acquired from Colonel W. C. Greene embrace that of a hydroelectric plant.

QUERETARO (Queretaro), MEX.—The Ajuchitlan Mining & Milling Co., which is operating mines near Ahorcado, this state, is increasing its electrical equipment. It obtains its power from the Queretaro Power Co., of this city.

IXMIQUILPAN (Hidalgo), MEX.—J. C. Azan, Engr., and associates will erect a hydro-electric plant of 5,000 HP., on the Tonantongo River, about 15 miles east of here. Mr. Azan is now making the surveys for the proposed plant. Transmission lines will be constructed and the power conveyed to the districts of Zimapan, Actopan and Ixmiquilpan.

BRIDGES.

TILTON, N. H.—Bids are asked by the Joint Committee of Tilton and Northfield until 1 p. m., June 13, for replacing the present Shaker bridge by a new iron structure. The specifications call for a 2-span iron bridge, 132-ft. in length.

BUFFALO, N. Y.—MAHONEY & SWANSON have been awarded contract for the construction of a new bridge at Fairmont Ave. and Winson St., at $36,626. F. G. Ward is Comr. Pub. Wks.

HILLSDALE, N. J.—The Board of Chosen Freeholders, Hackensack, on May 23, awarded contract for constructing a steel bridge over Pascack Creek at Hillsdale to the CEMENT PAVING & CONSTRUCTION CO., of Jersey City, at $8,789.

READING, PA.—Bids are asked by A. L. Rhoads, County Controller, untel 10 a. m., June 23, for the erection of a reinforced concrete arch bridge over Bernhart Creek, known as Spring Valley bridge.

Bids are asked by A. L. Rhoads, County Controller, until 10 a. m., June 16, for painting various bridges in the county.

PITTSBURG, PA.—Bids are asked until June 27 by the city for the construction of the three river piers of the North Side Point bridge across the Allegheny River. About 10,000 cu. yds. of stone and concrete masonry will be required. Plans and specifications can be obtained at the Bureau of Construction, City Hall. N. S. Sprague is Supt. Bureau.

Bids are asked by R. J. Cunningham, County Controller, until noon, June 15, for the construction of four reinforced concrete arch bridges as follows: Bridge No. 1, Boggs Run, Moon Township; Bridge No. 4, Lick Run, Bethel Township; Bridge No. 2, Piney Fork, North branch, Bethel Township; Bridge No. 7, Sewickley Creek, Marshall Township. Bids shall be by the cubic yard for masonry in place and by the hundred pounds for reinforced steel in place. Specifications and plans can be seen at the office of the County Engineer, room 308, Courthouse.

The citizens have voted $175,000 of bonds for the construction of a reinforced concrete bridge on Lorimer Ave., over Beechwood Boulevard. The plans call for a structure 630 ft. long, with a roadway of 50 ft. and 10-ft. sidewalks. The main span will be 300 ft. and will stand 115 ft. above the boulevard.

BALTIMORE, MD.—Plans for the new bridge the Harbor Board is to build over Jones Falls at Pratt St., were approved on May 31 by that board and the Board of Estimates. W. J. Douglas, Engr., of Washington, is to be the consulting engineer in the work. The structure is to be 120 ft. wide and will cost $9,000.

RICHMOND, VA.—The city will construct the proposed reinforced concrete or stone bridge connecting wards of the city. Estimated cost, $250,000. George S. Crenshaw may be addressed.

SUSSEX, VA.—Bids are asked by the Clerk Sussex County until noon, June 16, for the construction of three steel bridges in Sussex County. P. St. J. Wilson is State Highway Comr., Richmond.

MADISON, GA.—Morgan County will construct a bridge across Hard Labor Creek, known as Boon's bridge, to be 340 ft. long and 20 ft. wide. Bids are asked until June 9. P. G. Walker is Chn. Bd. of Roads and Revenues, Morgan County.

CARNESVILLE, GA.—Carnesville & Toccoa R. R. Co., will construct a 175-ft. bridge across North Broad River. W. S. Erwin, Clarkesville, Ga., is interested.

CLEVELAND, OHIO.—Bids are asked until 11 a. m., June 25, by the Board of County Commissioners for the construction of bridges as follows: Report No. 2638 concrete bridge, Harvard Road, Warrensville Township; Report No. 2639, concrete bridge, Lander Road, Orange Township; Report No. 2644, concrete culvert, Chagrin River Road, Orange Township; Report No. 2650, bridge extension, Harrington and Brook Park Roads, Rockport and Middleburg Townships. Frank R. Lander is County Surv.

HUBBARD, OHIO.—Bids are asked until June 27, readvertisement of bids asked May 23 by the County Commissioners, for the construction of a bridge over Yankee Run on East Liberty St., in Hubbard. W. R. Carrington is Clk. Comrs.

NILES, OHIO.—Bids will be received by the Board of County Commissioners of Trumbull County, until June 27, for the construction of superstructure of a bridge on Park Ave. extension, Niles. Bids are desired on both concrete and stone masonry. Fred T. Stone is County Audr.

ELYRIA, OHIO.—Bids will be received until June 17, by the Board County Commissioners, Charles Chandler, Clk., for furnishing material and constructing two steel bridges, one in Grafton Township on the Grafton La Grange Road, and on the road line between Wellington and Brighton Township, Nos. 152 and 153, respectively.

CLEVELAND, OHIO.—Contract for the construction of the concrete arch bridge on Union Road, bids opened on May 25, has been awarded by the County Commissioners to the NORTHERN OHIO PAVING & CONSTRUCTING CO., of Cleveland. Estimated cost, $8,000.

*HURON, OHIO.—Bids are asked for by the Commissioners of Erie County for a highway rolling lift bridge over the Huron River at Huron, until 10 a. m., July 9. Estimated cost, $50,000. John Deist is County Audr.

EVANSVILLE, IND.—The HOLLERBACH & MAY CO., of Evansville, has been awarded contract at about $60,000, by the Walsh Construction Co., Davenport, Iowa, for the construction of a bridge across the Wabash River on the Cleveland, Cincinnati, Chicago & St. Louis Ry., between this city and Mount Carmel.

KOKOMO, IND.—The county commissioners of Howard County have awarded contract to S. E. SMITH, Richmond, Ind., for constructing a bridge across Wild Cat Creek in Center Township. Estimated cost, $4,990. A. B. Easterling is County Audr.

MARION, IND.—The County Commissioners of Grant County has awarded general contract for six arches to WILCUTTS & HOOVER, Marion, Ind. A. R. Smith is Bridge Engr.

SCOTTSBURG, IND.—Bids are asked until 11 a. m., June 13, by the County Commissioners for the construction of a 50-ft. bridge over White Oak Creek. Frank Gardner is Audr., Scott County.

NEW CASTLE, IND.—Bids are asked until 10 a. m., June 16, by County Commissioners for the construction of arches, culverts and bridges. W. L. Risk is Audr. Henry County.

YPSILANTI, MICH. — The ADVANCE CONSTRUCTION CO. has been awarded contract at $22,800, for the construction of a bridge in this city. Bids were opened on May 18.

HIGHLAND PARK, ILL.—JOHN O'BRIEN 92 La Salle St., Chicago, has secured contract for constructing a concrete bridge, 120 ft. long, 16 ft. roadway on Waverly St., at about $7,000. H. L. Bowen is Comr. Pub. Wks.

LINCOLN, ILL.—Contract has been awarded to DECATUR BRIDGE CO., for construction of the new steel bridge across Salt Creek, at $6,880.

NEW LONDON, WIS.—The city has awarded contract to WALTER BLAKE, 627 River St., Appleton, Wis., for constructing a bridge over the Embarrass River.

ALBIA, IOWA.—The Chicago, Burlington & Qunicy Ry., 209 Adams St., Chicago, Ill., contemplates building a viaduct on Main St. T. E. Calvert is Ch. Engr.; C. H. Cartlidge is Bridge Engr.

ALTA VISTA, IOWA.—Bids are asked until 1 p. m., June 15, by F. N. Lentz, County Audr., New Hampton, for a 60-ft. steel highway bridge with concrete floor at Alta Vista.

TAYLOR'S FALLS, MINN.—All bids for the construction of the reinforced concrete arch bridge across the St. Croix River were rejected on June 3. New bids will be received at the office of the Village Council until 1 p. m., June 24. L. P. Wolf, St. Paul, Minn., is Consulting Engr.

ST. PAUL, MINN.—The Minneapolis, St. Paul & Sault Ste Marie Ry. Co., awarded contracts on May 27 for the construction of the new St. Croix River bridge that is to shorten the line of the Chicago division and bring trains into St. Paul directly. The AMERICAN BRIDGE CO., 115 Adams St., Chicago, will furnish the structural steel, which will amount to about 4,500 tons, and the KELLY - ATKINSON CONSTRUCTION CO., 188 Madison St., Chicago, will do the work of erecting. The two contracts involve about $600,000.

MARYSVILLE, KAN.—The construction of a bridge over the Big Blue River is contemplated. Estimated cost, $16,000.

COUNCIL GROVE, KAN.—The Board of County Commissioners of Morris County, George J. Parker, County Clerk, will receive bids until July 6 for the construction of three bridges.

MINNEAPOLIS, KAN.—Bids are asked until noon, June 15, by the County Clerk, Minneapolis, for four bridges consisting of one 150-ft. steel span with a concrete floor on concrete abutments, and two 60-ft. and one 30-ft. reinforced concrete bridges. Plans and specifications are on file in the County Clerk's office, and in the office of W. S. Gearhart, Highway Engr., Manhattan, Kan.

PLAINS, MONT. — Landers County, on May 24 voted $130,000 for constructing a wagon bridge at Plains, Thompson and Trout Creek.

*FORT SMITH, ARK.—Plans and specifications are on file at the office of Engineering News, New York, for the substructure and erection of the superstructure; the superstructure delivered and erected of a bridge over the Arkansas River, between Fort Smith and Van Buren, Ark. The bridge consists of nine 196-ft. spans carrying double track electric railway and a single track railway on a paved roadway between trusses, two paved roadways, and two sidewalks on cantilevers outside trusses. Piers and abutments will be sunk by the pneumatic process. Steel, about 4,000 tons. Masonry, about 10,000 cu. yds. Bids are asked until June 13.

GOLIAD, TEX.—The Goliad County Commissioners have awarded contract to J. J. GREATHOUSE of Goliad for constructing a steel bridge across Perdido Creek on Germantown-Fannin Road.

DALLAS, TEX.—The HUGHES-O'ROURKE CONSTRUCTION CO., of Dallas, has been awarded contract for the bridges for the St. Louis Southwestern R. R. extension that is to be built from Gatesville to Comanche. The work consists of three bridges, with 135-ft. spans across the Leon River, and several smaller bridges and culverts along the line. The concrete abutments of the three larger bridges will range from 50 to 75 ft. high. Thompson & Scott, of St. Louis, Mo., are the general contractors for the construction of this extension. The road must be finished to Hamilton by September 15.

TULSA, OKLA.—Bids are asked by the Board of County Commissioners until June 22 for constructing 28 bridges. W. L. North is Chn. Bd.

UNA, COLO.—We are officially advised that the C. G. SHEELY CONSTRUCTION CO., 219 McPhee Bldg., Denver, Colo., has been awarded contract, bids opened on May 28, for the construction of a steel bridge across the Grand River near Una, Garfield County. The structure will have one 203-ft. truss span, one 630-ft. plate girder span, and will be 16 ft. wide. C. W. Comstock is State Engr., Denver.

LACY, COLO.—We are officially advised that contract for the construction of a bridge across the Grande River near Lacy, Garfield County, bridge to have one 203-ft. span, one 64-ft. plate-girder span, 16-ft. wide has been awarded to the C. G. SHEELY CONSTRUCTION CO., 219 McPhee Bldg., Denver. Bids were opened on May 28. C. W. Comstock is State Engr.

COLFAX, N. MEX.—The Territorial Board of Control of New Mexico is taking bids for the construction of a steel and reinforced concrete bridge to be built across the Vermijo River at Colfax. It will have a span of 100 ft. Plans are on file at the office of V. L. Sullivan, Territorial Engr., Santa Fe.

SEATTLE, WASH.—The Oregon & Washington R. R., it is reported, is having plans prepared and is ready to ask for bids for constructing a viaduct and retaining wall of reinforced concrete, to have a total length of 2,500 ft., in Seattle. Estimated cost, about $200,000. J. R. Holmes, Seattle, is Asst. Gen. Mgr.

TEMPLETON, CAL.—Bids will be received by H. H. Carpenter, Clk. Bd. Supervisors, until 10 a. m., July 6, for the construction of a steel concrete highway bridge over the Salinas River, at Rector Crossing, on the Santa Margarita and Pose Road, according to plans and specifications on file at the office of the clerk.

SAN FRANCISCO, CAL.—Contract for the construction of the Mission Ave. viaduct was awarded by the city on May 25 to the KEYSTONE CONSTRUCTION CO., San Francisco, at $143,243, which includes the cost of installing a subjacent sewer.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

HOLYOKE, MASS.—Plans are finished for the 6-story building to be erected by J. Russell & Co., on Main St., opposite the Hotel Hamilton. The plans will be submitted to the contractors as soon as the firm learns the extent of the pile driving necessary to make the foundation solid. The building will have a frontage of 53 ft. and will fill a space now used by a blacksmith shop and junk shop. The building will be used entirely by the owners, J. Russell & Co., now located in the Hotel Hamilton block. The office and salesroom will be on the first floor and the other five stories will be devoted to storage purposes. The walls will be of brick and the interior will be of fireproof material.

BOSTON, MASS.—Plans are under consideration for the erection of an hotel on the site of the old Museum of Fine Arts property in Copley Sq. The project is being advanced by the Copley Square Trust, Moses Williams, 126 State St., and J. Morris Meredith, 15 Congress St., Trustees. The Trust offers the city land that totals 15,500 ft. and retains 13,000 ft. to build on, which is in addition to the land now occupied by the old Museum building. It proposes to make Stuart St. 52 ft. wider, instead of 40; Trinity Pl., 52 ft. wider, instead of 40; Dartmouth St., 72 ft. wide, instedy of 60. The so-called bow-piece in front of the present building, which is 32 ft. at its widest part, is also offered to the city.

FORT ADAMS (Newport post-office), R. I.—Bids are asked until 10 a. m., June 14, by Lieut. Frank H. Phipps, Constr. Q. M., for the material and labor required in lowering of boiler room floor and relocating the boilers and boiler connections, etc., pertaining to the steam heating system in the 3-company Barrack Building No. 22 at Fort Adams, R. I.

CHESHIRE, CONN.—It is announced that plans for the proposed state reformatory to be built at Cheshire, Conn., under a state appropriation, are nearly ready and bids will be asked for shortly. W. D. Johnson, 26 State St., Hartford, Conn., is Arch.

BUFFALO, N. Y.—Green & Wicks, Archs., 110 Franklin St., are preparing tentative plans for a 2-story addition to be made to the Chamber of Commerce Building, Main and Seneca Sts., and to be of steel, terra cotta and stone. Cost, $70,000. Wm. E. Robertson is Pres., Chamber of Commerce Bldg. The addition will consist of constructing the proposed 14th and 15th stories of the building.

Henry L. Spann, Arch., 38 Pascal St., is completing plans for a theater building, 81 × 108 ft., to be erected at William and Sherman Sts., by M. Slotkin, 537 William St. Construction will be of brick and terra cotta. Cost, $50,000.

BUFFALO, N. Y.—The Columbia Turn Verein is taking figures for the erection of a clubhouse, 50 × 112 ft., two stories and basement, of brick and structural iron, which it will erect at Genesee and Keho Sts., from plans prepared by Jacob Oberkircher, Arch., 46 Orange St. Charles Ullrich is Pres., 402 Koons Ave.

NEW YORK, N. Y.—Bids are asked by C. B. J. Snyder, Supt. of School Bldgs., Dept. of Education, until 11 a. m., June 13, for sanitary alterations (new water closets and water heater, etc.) at Public School No. 46, on St. Nicholas Ave. and 156th St., Boro. of Manhattan; for alterations and repairs to heating and ventilating apparatus in Public Schools Nos. 14, 15 and 20, Boro. of Richmond.

Plans have been filed for a 7-story brick store and office building, to be erected at the southeast corner of Fifth Ave. and 42d St., opposite the new public library. The building will be erected on the former site of the American Savings Bank, and will have a frontage of 73.3 ft. on the avenue by 96 ft. on the street, with facades of brick and terra cotta. Edwin Wolf is the owner, and Thomas W. Lamb, 224 Fifth Ave., Arch. Cost, $150,000.

A 12-story brick and stone apartment house to cost $100,000, is to be built at the northeast corner of 98th St. and Broadway. It will be erected by T. J. McLaughlin's Sons from plans by George & Edward Blum, Archs., 505 Fifth Ave. This apartment house will occupy a plot 100.11 × 145 × 136 ft.

The 8-story brick apartment houses, to cost $300,000, for which plans were recently filed, will be put up on the premises at 517 to 527 West 112th St. They will be erected by the Klaw Realty Co., from plans by Lawler & Haase, Archs., 69 Wall St.

On the southerly side of 92d St., 125 ft. south of Broadway, the Winston Holding Co. will build a $200,000 8-story apartment house. It will be of brick and stone construction, from plans by Gronenberg & Leuchtag, Archs., 3 West 22d St.

NEW YORK, N. Y.—A 12-story brick and stone apartment house, to cost $775,000, will occupy the northeast corner of 99th St. and Riverside Drive. It will have a frontage of 105 ft. on the drive and a little more than 121 ft. on the street. It will be of brick and stone construction and will be put up by the Highwood Realty & Construction Co. from plans by Rouse & Goldstone, Archs., 12 West 32d St.

Plans have been filed for adding three stories to the 7-story warehouse at the southeast corner of West and Vestry Sts. at a cost of $75,000. John Finn is the owner. Frank J. Heimle is Arch.

J. Woolley, Arch., has filed for Jacob Rothschild plans for building an 18-story annex to the 15-story office and loft building at the northwest corner of Fifth Ave. and 15th St., known as the Stuyvesant Building. The new building, which is noted on the plans as an extension, will be located on the Fifth Ave. side of the present building. The cost will be $250,000.

Plans have been filed for a 4-story college to be built on the south side of 35th St., 72 ft. east of Second Ave., opposite St. Gabriel's Park, for the New York Dental School now at 20 West 14th St., to be known as the College of Dental and Oral Surgery of New York. The building will be fireproof with a facade of brick, having a frontage of 78 ft. and a depth of 88.9 ft., with an extension. In the basement will be a forge and metallurgy rooms. The fourth floor will contain a room for oral surgery, the John L. Hart operating room, an anesthetic room, which will take up one-half of the floor. John B. Snooks & Sons, Archs., 73 Nassau St., estimate the cost at $130,000.

The same architects have filed plans for an 8-story brick store and loft to be erected at 390 to 396 Fourth Ave. for Elbridge T. Gerry, of Newport, R. I. The building will have a frontage of 86 ft. and a depth of 78.6 ft., with an extension. The facade will be of limestone at the first and second stories, with brick above, and will be fireproof. The cost is estimated at $135,000.

Plans have been filed for making extensive alterations to the clubhouse of the Downtown Association, of which Donald Mackay is Pres., at 60 Pine St. The plans call for building a side extension, five and six stories high, 28.1 × 133.3 ft., in which will be located a dining room on the third floor, three private dining rooms on the fourth floor, toilets and washroom and locker room on the fifth floor. Partitions are to be moved to make a hall with a central entrance to the main dining room and installing new plumbing at a cost of $100,000. Warren & Wetmore are Archs., 3 East 33d St.

NEW YORK, N. Y.—We are officially advised that plans have been filed for a 15-story brick fireproof office building, 24.8 × 100 ft., to be erected on the east side of Madison Ave., 74 ft. north of 24th St., next to the Madison Square Presbyterian Church, for the Pullman Holding Co., L. H. Slawson, Pres. The facade will be of brick, with trimmings of limestone and terra cotta. There will be an entrance ornamented with Ionic columns. The cost will be $225,000. William H. Gompert is Arch., 2102 Broadway. Estimates are being taken.

NEW YORK, N. Y.—Bids are asked by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, New York, until 3 p. m., June 29, for (1) alterations, repairs, etc., at Public School No. 44, on Throop and Putnam Aves. and Madison St., Boro. of Brooklyn; (2) alterations, repairs, etc., at Truant School, Jamaica Ave., opposite Enfield St., Boro. of Brooklyn; (3) installing electric ash hoists in Manual Training High School, Seventh Ave., Fourth and Fifth Sts., and Public School No. 149, Sutter Ave., Vermont and Wyona Sts., Boro. of Brooklyn; (4) for the general construction, etc., of addition to and alterations in Girls' High School, on the easterly side of Nostrand Ave., between Halsey and Macon Sts., Boro. of Brooklyn.

Bids are asked by C. B. J. Snyder, Supt. of School Bldgs., Dept. of Education, until 3 p. m., June 27, for the general construction, etc., of additions to and alterations in Boys' High School, on westerly side of Marcy Ave., between Madison St. and Putnam Ave., Boro. of Brooklyn.

ALBANY, N. Y.—Architects are asked by the Board of Contract and Supply, Albany, to submit plans for the construction of the proposed new High School for this city, the time for submitting competitive plans to close at noon, Sept. 10. The proposed building will have three stories and basement, will be of fireproof construction with exterior of brick trimmed with terra cotta or stone. The new school is to accommodate 1,600 pupils. Isidore Wachsman is Secy. of the Board.

HAMILTON, N. Y.—EDWARD K. FENNO, of Syracuse, has been awarded the contract for remodelling West Hall, one of the old buildings on the campus at Colgate University at Hamilton, into a modern dormitory building. The work will cost about $50,000. West Hall is a 5-story building and was built in 1827 of stone. The walls are nearly two feet in thickness.

PHILADELPHIA, PA.—The contract for the church, to be built at 20th and Locust Sts., on the site of St. Patrick's Roman Catholic Church, has been awarded to MELODY & K[illegible]ING, Bailey Bldg. It will cost $212,000. The plans provide for a 1-story stone structure measuring 80 × 160 ft.

Lamb & Co. have sold the old residence at the northwest corner of 35th and Spring Garden Sts., belonging to the Charles Lafferty Estate, for the Fidelity Trust Co. to a purchaser who will improve the site by the erection of a 4-story housekeeping flat building, costing about $100,000. The property measures 105 × 125 ft.

PITTSBURG, PA.—By an ordinance introduced in Councils on May 31, according to press reports, St. Louis capitalists, represented by Arthur N. Sager, propose to build a new City Hall for Pittsburg. They offer to lease the site of the present market house from the city for 99 years and to erect thereon a 23-story building as a market, office building and City Hall combined. The ordinance provides that the building shall cost not less than $3,000,000 and cover the space now occupied by both markets, the leasehold estate to be bonded to provide the necessary funds. Market and Diamond Sts. are to be arched, providing a thoroughfare through the structure, and the city paid one-third of the net income from the building and to have suitable offices for its various departments. The proposal is made on a $3,000,000 basis, but if the project succeeds the building is to cost about $5,000,000. The offer is made because the city itself has not been able to furnish the money for the improvement, owing to other pressing financial needs.

W. P. Snyder, Frick Bldg., intends to erect a winter residence on the Northside to cost $75,000. It will be on the Elizabeth F. McCandless property, 48 × 132 ft., at the northeast corner of Ridge and Grant Ave. The building will be of fireproof construction, and will be of the New York town house type. It will be four stories and will be equipped with an elevator. On the McCandless lot there is a 3-story brick residence of 14 rooms and three bath rooms, and on the rear of the lot is a brick garage. These buildings will be torn down.

HOMEWOOD (Pittsburg post-office), PA.—The contract for the erection of a parochial school for the Holy Rosary parish, Homewood, has been let to H. L. KREUSLER & CO., 3301 Penn Ave., at $100,800. The material to be used will be cut stone and the building will have three stories, with 21 educational rooms. An auditorium for church entertainments is included.

BALTIMORE, MD.—The lot at the corner of German and Grant Sts., which was purchased by Martien & Co., real estate brokers, for clients, will be improved with an additional 7-story office building for the United States Fidelity & Guaranty Co. to cost $200,000. The structure will be 65 ft. front on German St. with a depth of 72 ft. to Grant St., and will be an addition to the present building at Calvert and German Sts. Otto G. Simonson, American Bldg., is Arch. Noted last week.

Bids are asked until 3 p. m., June 20, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for one high-pressure steam water tube boiler and accessories for the U. S. post-office, court-house, etc., at Baltimore, Md.

*TROY, ALA.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., July 5, for the construction complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office at Troy, Ala.

*DEMOPOLIS, ALA.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., July 18, for the construction complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Demopolis, Ala.

MERIDIAN, MISS.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of an extension to the post-office at Meridian, Miss., to the NEWPORT CONTRACTING & ENGINEERING CO., Newport News, Va., at $48,898.

SHREVEPORT, LA.—James Knox Taylor, Superv. Arch., of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Shreveport, La., to CHARLES W. PECKWORTH, 415 Hudson St., New York, at $172,897. A complate list of bids was given on May 19.

It is stated that BLAKE & CO., St. Louis, have been awarded the contract to erect the joint passenger depot here for the Cotton Belt and the Louisiana & Arkansas railways. It is stated the cost of the depot will approximate $40,000.

CHATTANOOGA, TENN.—GEORGE A. FULLER & CO., Fuller Bldg., New York, and Chicago, were the successful bidders for the contract to erect the new Hamilton National Bank at the corner of West Seventh and Market Sts. Approximately $350,000 will be expended to erect and equip the building. The building will have 15 stories and basement. It will have a frontage of nearly 61 ft. on Market St., extending 100 ft. toward Broad St. to the Wiehl Building. R. H. Hunt, James Bldg., Chattanooga, is Arch.

CATLETTSBURG, KY.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office building at Catlettsburg, Ky., to EDWARD HENRY, of Sault Ste. Marie, Mich., at $92,805. A full list of bidders was given on May 26.

FRANKFORT, KY.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Frankfort, Ky., to JOHN G. UNKEFER & CO., of Minerva, Ohio, at $46,770.

COLUMBUS, OHIO.—The St. Clair Hospital Co., of Columbus, has been incorporated with a capital stock of $50,000 to erect a hospital on St. Clair Ave.

E. H. KIBBS has been awarded the contract for the construction of a business block at Spring and Front Sts. for Orr, Black & Price, Spring and Front Sts.

ATHENS, OHIO.—Frederick W. Elliott, Board of Trade Bldg., Columbus, has been commissioned to draw plans and specifications for a school building to be erected at Athens.

WEST UNION, OHIO.—Bids will be received at West Union by the Adams County Commissioners until June 16 for the construction of a court-house from plans by Murray & Son, of Ironton, Ohio.

CLEVELAND, OHIO.—A $60,000 addition is to be built to Fern Hall at 3250 Euclid Ave. It will be 152 × 200 ft. four stories high, and fireproof throughout. Shale brick and white terra cotta with stone trimmings will be used in the new structure. There will be 16 suites of from two to six rooms each, with bathrooms. Each suite will have a fireproof safe installed in one of the walls. Plans for the building are being made by Knox & Elliott, Archs., Rockefeller Bldg. R. M. Burrows, Mgr. of the present building, will also control the new one.

The Fireproof Storage Co. will build at once a building on Euclid Ave., between East 115th and East 116th Sts. Cost, $100,000.

PERU, IND.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Peru, Ind., to P. H. McCORMICK CO., Columbus, Ohio, at $68,531. Time, June 1, 1911.

INDIANAPOLIS, IND.—Vonnegut & Bohn, Archs., Indiana Trust Bldg., are making plans on which they will ask for bids for the erection of a club house on Walnut St.

R. P. Daggert & Co., Lemcke Bldg., Indianapolis, Ind., Archs., and Ammerman, McColl & Anderson, Engrs., Penobscot Bldg., Detroit, Mich., are preparing plans and specifications for a 2-story school, 220 × 190 ft., to be erected in Indianapolis for the Board of Education, J. E. Cleland, Business Director, 312 North Meridan St. Construction will be of press brick with Bedford stone trimmings, steam heat and fan system for ventilation.

INDIANAPOLIS, IND.—Vonegut & Bohn, Archs., Indiana Trust Bldg., are preparing plans on which they will ask for bids for the erection of a Unitarian church at Alabama and 15th Sts.

INDIANAPOLIS, IND.—R. A. Lemcke, Lemcke Bldg., is asking for bids for the construction of a 15-story office building on Pennsylvania St., adjoining the present Lemcke Building. Plans are ready for bidders. The structure will be 100 × 202½ ft. There will be an arcade reaching through the new and old buildings.

RUSHVILLE, IND.—Bids are asked by A. L. Wenship, Cashier of Rushville National Bank, until 1 p. m., June 29, for the erection and completion of a bank building. Separate bids are requested on steam heating, plumbing, electric wiring and gas piping. J. W. Gadis is Arch., 314½ Main St.

GOSHEN, IND.—Dr. W. R. McGarvey has ordered plans on which he will ask for bids for the construction of a 3-story hotel at Lake Wa Wasee.

FT. WAYNE, IND.—S. F. Bowser & Co. have purchased a site on Holton Ave. and will construct a warehouse, 85 × 300 ft., three stories high. Bids will be asked for as soon as plans can be completed.

MARQUETTE, MICH.—The Board of Education of Marquette, Mich., is contemplating a 3-story addition to one of the present school buildings of this city.

KALAMAZOO, MICH.—The Masonic Lodge of Kalamazoo, Mich., has succeeded in securing the necessary funds, $60,000, for the proposed Masonic Temple to be erected in Kalamazoo.

HILLMAN, MICH.—JAMES M. LEWIS, of Alpena, Mich., has been awarded the contract for the State Normal School to be erected at Hillman, Mich. The building is to be of brick and stone construction.

WYANDOTTE, MICH.—Kastler & Walsh, Chamber of Commerce Bldg., Detroit, are preparing plans and specifications for a new 4-story Temple, 50 × 100 ft., for the E. B. Ward Lodge, I. O. O. F., of Wyandotte, Mich. Paving and stock brick, Bedford stone will be used in construction, with composition roof, galvanized iron cornice, structural iron, steel, electric fixtures and hard wood floors and finish.

GROSSE POINTE FARMS, MICH.—Stratton & Baldwin, Union Trust Bldg., Detroit, have let for Richard P. Joy, Penobscot Bldg., the following contracts for his proposed brick residence to be erected at Grosse Pointe, Mich., to cost $40,000: Carpentry, to CONRAD KELLER & CO., 657 Canfield Ave.; masonry, cut stone and iron work, to LeMAY & WHALEN, Tolsma Bldg.; plumbing and heating, to O. A. WURM, 48 Adams Ave., West.

DETROIT, MICH.—George D. Mason, 80 Griswold St., has been commissioned by the Woodward Ave. Baptist Church, Rev. Maurice P. Fifes, Pastor, to prepare plans for a parish house to cost $100,000. The architect will take figures about June 15.

Malcomson & Higginbotham, Moffat Bldg., Detroit, let the following contracts on May 18 for a 3-story and basement High School, 269 × 193 ft., for the Board of Education of Detroit, William J. Lee, Secy., 50 Broadway: Masonry, to WILLIAM H. TRAVIS, 335 Fifth Ave.; carpentry, to HARCUS & CO., 770 Russell St.; composition roofing, to AMERICAN ROOFING CO., 634 Gratiot St.; blower heating system, to VINTON CO., 120 Woodbridge St., East; plumbing, to O'CONNOR BROS., Penobscot Bldg.; plastering, to M. FINN, 128 Pine St.; iron and steel work, to WHITEHEAD & KALES, Beecher Ave. and M. C. R. R.

Baxter & O'Dell, Hammond Bldg., have let the following contracts for the new 4-story and basement apartment building, containing 32 apartments, for S. M. Swales, 1220 Woodward Ave.: Masonry, to GEORGE A. VIVIER, 479 Forrest Ave., West; carpentry, to SCHMEID-SISMAN CO., 391 Beaufait St.; composition roofing, to AMERICAN ROOFING CO., 634 Gratiot St.; steam heating and plumbing, to ERNST BROS., 414 Woodward Ave.; plastering, to A. C. GOODALL & SON, Penobscot Bldg.; structural iron work, to WHITEHEAD & KALES, Beecher Ave. and M. C. R. R.

The Wayne County Medical Society, R. A. Jamieson, M. D., Secy., 147 Park St., has an option on a lot 60 × 100 ft., and will erect a 4-story office building at an estimated cost of $100,000.

The Dom Polski Association, Dr. B. W. Pasternacki, Secy., 254 Canfield Ave., East, will erect a club house at the corner of Forrest Ave. and Rivard St. soon.

JOLIET, ILL.—See "Elgin, Joliet & Eastern" item under Railways.

CENTRALIA, ILL.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Centralia, Ill., to HANSON BROS., 59 Dearborn St., Chicago, at $54,993. Time, July 1, 1911.

CHICAGO, ILL.—La Verne W. Noyes plans the erection of a building at the southeast corner of 20th St. and Michigan Ave. He will tear down all the buildings now on the site, and the work on the new structure will be started as soon as possible. The new building will be ready for occupancy not later than Jan. 1, 1911. Plans are being prepared by A. S. Alshuler, Arch., 154 Munroe St. The cost of the building will be $500,000. The Central Realty & Investment Co. negotiated the purchase of the property and will supervise the construction and renting of the building, and will act as agents for Mr. Noyes.

MOLINE, ILL.—Decision has been reached by E. A. and J. N. Pierr to improve immediately the real estate on the north side of Fifth Ave., adjoining the Chase Block, recently acquired from J. Ullman. Tentative plans for a 3-story flat and store building have been drawn by W. H. Whitsitt, Arch., 422½ 16th St., Moline. The building when completed will cost approximately $75,000. It will be built of brick and the ground dimensions will be 80 × 97 ft. The lot is 80 × 150 ft. and the remaining 43 ft. will be sodded and made into a court for the use of tenants. The court will be enclosed with a 6-ft. wall at the two sides and one end.

MILWAUKEE, WIS.—The Wisconsin Consistory of Masons has purchased a site at the corner of Mason and Jackson Sts. and will erect a building. Plans are now being prepared for a structure which is estimated to cost $150,000.

E. R. Godfrey & Sons Co., has purchased the property on Detroit St., between Milwaukee St. and Broadway, for $125,000. The firm plans to erect one new building and remodel the present ones.

Frederick Weinhagen has purchased the southeast corner of Fourth and Wells Sts., at a cost of $100,000 and after raising the present building plans to erect a modern office and light manufacturing building. The lot is 100 × 150 ft.

The Gridley Dairy Co. has plans for a horse and wagon storage to be built at Eighth and Sycamore Sts. The building will have solid brick walls, three stories and basement, 125 × 150 ft., and will accommodate 100 teams.

BELOIT, WIS.—Bids are asked until 3 p. m., July 7, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Beloit, Wis.

ST. PAUL, MINN.—The Bethel Mission Association, David Morgan, Supt., contemplates erecting a 6-story pressed brick and cut stone, fireproof home for the poor laboring classes. Cost, $120,000.

The St. James and Memorial English Lutheran churches will combine and will erect a cut stone church at the corner of Laurel Ave. and Oxford St. Rev. William F. Bacher and Rev. H. C. Schnur are the respective pastors.

ST. PAUL, MINN.—J. Walter Stevens, Arch., New York Life Bldg., has awarded the contract for the construction of a cut stone residence for C. L. Johnston, on Summit Ave., near Victoria St., to the ST. PAUL BUILDING CO., 460 Rice St., St. Paul, at $42,600.

John Klein has awarded the contract for the superstructure of his proposed 4-story brick and stone, reinforced-concrete store and office building at St. Peter St., near Seventh St., to LAUER BROS., foot of Chesnut St. H. Kretz & Co., New York Life Bldg., are Archs. Cost, $42,000.

The State Board of Control has awarded the contract for the State Asylum for the Inebriates at Willmar at $180,991, and the State Industrial School for Girls at Sauk Center, at $122,607, to JOHN LAURITZSON, Fergus Falls, Minn. Charles Halvorson is Chn.; C. H. Johnston, Manhattan Bldg., St. Paul, is State Arch.

NORTHFIELD, MINN.—Bids will be received until June 11 by Alban & Fisher, Archs., St. Paul, Minn., for the construction of a fireproof dormitory to be built here for St. Olaf's College. Cost, $60,000.

CARROLLTON, MO.—Bids were received as follows on June 2 by James Knox Taylor, Super. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office at Carrollton, Mo.: Bartley & Kling, Inc., Cedar Rapids, Iowa, $57,000; McHenry-Beatty Co., East Liverpool, Ohio, $56,888; Hiram Lloyd Building & Construction Co., Odd Fellows Bldg., St. Louis, Mo., $54,997.

ST. LOUIS, MO.—Dr. Adam Flickinger, 1313 Pine St., plans to erect a $75,000 6-story brick commercial building on Pine St. west of 13th St. Dr. Flickinger, through the C. M. McDonald Real Estate Co., has closed the sale of 1306 Pine St. with a lot 20 × 109 ft. to an alley. This, with his adjoining property at 1308 Pine St., gives him a lot fronting 40 ft., on which to erect his proposed building.

The St. Louis Southwestern Ry. has bought a frontage of 1,000 ft. between Dickson, Florida, Lewis and Main Sts., in North St. Louis, and will erect on the site a freight depot to cost $2,500,000. M. L. Lynch is Ch. Engr., Tyler, Tex.

A public market, to cost $500,000, will be erected on the site of the present market. It will cover the entire block between Broadway, Morgan St., Lucas Ave. and Sixth St. The project was started by the Progressive Downtown Improvement Association and will be carried through by that organization. There are more than 100 members. J. F. Sensenbrenner is Pres.; Sigmund Baer, Treas.; Samuel Bowman, Vice-Pres. and Executive Officer, and Seymour Shiele, Secy. The Board of Directors are David May, E. H. Wolf, Louis Idler, C. P. Johnson, Leo A. Landau, J. George Bremer, J. H. Buettner, Alexander T. Gast, M. Bauman, S. Boehm, P. Burnes, Thomas Dunn and Charles Niedringhaus. The executive offices are in the Third National Bank Building. The new market-house is to be a 2-story building. The main entrance will be on Broadway. There will be eight stores on Broadway and eight on Sixth St. An arcade will run through from one street to the other. In the center of the ground floor will be a large booth for flowers. There will be more than 150 stalls.

HOUSTON, TEX.—A hotel of steel construction, to cost at least $500,000 and to be ten stories or more in height, will be erected by a stock company at the corner of Main St. and Walker Ave. The building will front 100 ft. on Main St. and 125 ft. on Walker Ave. The structure will be put up by the Bender Building Co., the corporation membership to include Eugene L. Bender, Frank V. Bender and a number of Houston financiers. A large part of the preliminary work has been done on the site. The foundations have been finished.

BROWNSVILLE, TEX.—The plans of J. F. Walker, of San Antonio, Tex., Arch. for the proposed hotel here to cost $350,000, have been approved by the local promoters of the project. A stock company is being organized to take hold of the matter. Col. Uriah Lott and others are interested. The plans call for a reinforced-concrete building of five stories and basement.

WACO, TEX.—The erection of a 15-story hotel building here is being promoted by local business men. It is stated that Adolphus Busch, of St. Louis, Mo., offers to take one-half the stock in the company that is to be formed to erect and operate the hotel.

FORT SILL, OKLA.—Bids are asked until 10 a. m., June 17, by Capt. David L. Stone, Constr. Q. M., for construction, plumbing and wiring two field officers' quarters, one 2-set officers' quarters and one 4-set officers' quarters at Fort Sill, Okla.

SEATTLE, WASH.—The West Coast Building Co. will build a 4-story store and hotel building at 601 Main St. The permit for the structure has been issued by the Superintendent of Buildings. The building is estimated to cost $50,500.

PORTLAND, ORE.—JAMES STEWART & CO., 30 Church St., New York, have secured the contract for the erection of the $450,000 12-story Selling Building, which is to be built at the southwest corner of Sixth and Adler Sts.

SAN DIEGO, CAL.—The San Diego Building Co., Scripps Bldg., has completed plans for a group of seven modern apartment buildings to be erected in Coronado Beach for Colonel H. J. Thaddeus. Estimated cost, $85,000.

SAN MATEO, CAL.—The Board of Trustees of the San Mateo High School district has decided that it will be necessary to call for new bids for the construction of the proposed school, as the bids opened at the meeting are all in excess of the recent estimate. The bids were as follows: Lange & Bergstrom, $76,508; Charles Wright, $77,900; James H. Young, $78,000; Wisnom & Berg, $78,950; Robert Caldwell, $79,597; John H. Wilson, $85,000; Robert Troast, $87,134, and B. J. Duffy, $94,254. The bond issue for the building and furnishings was only $100,000, and as the plumbing, furnishings and incidental fittings will cost approximately $40,000, the bond issue would not cover the aggregate cost.

SAN FRANCISCO, CAL.—At a recent meeting of the Board of Directors of the Olympic Club the contract was awarded for the construction of the proposed clubhouse on the north side of Post St., between Mason and Taylor Sts., to LINDGREN & CO., at a cost of $395,000. The contract calls for the completion of the club building within one year from the date that the contractors start work, which will be immediately. The new club will have a frontage on Post St. of 170 ft. with a depth of 137½ ft., covering the entire portion of the property owned by the club. It will be five stories high above the sidewalk, with two stories and a mezzanine floor below. Steel of sufficient strength to carry five additional stories will be used in the construction of the building. The first or main floor will be given over to the business offices, lounging rooms, directors' meeting rooms, etc., with the gymnasium to the rear, this apartment being 64 × 128 ft. On the second floor will be located the dining rooms and social rooms, including billiard and card rooms. The third, fourth and fifth floors will be utilized for sleeping quarters. East of the main building will be a 1-story addition containing the swimming tank. This building will be 100 ft. deep and have a frontage of 35 ft., with substantial tank. The building will be constructed of brick and stone, plain, but substantial. No changes were made in the exterior appearance in the original plans.

SAN FRANCISCO, CAL.—Bids are asked until 3 p. m., July 12, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction (including plumbing, gas piping, heating apparatus and electric conduits) of the attendants' quarters, U. S. Marine Hospital, at San Francisco.

LOS ANGELES, CAL.—The Board of Supervisors on May 31 received bids for erection of the proposed Historical and Art Museum Building at Agricultural Park: General construction, Alta Planing Mill Co., $225,748; J. F. Atkinson, $219,777; Richards Neusta Construction Co., $237,026; J. V. McNeill, $227,885; National Fire Proofing Co., $224,633; F. O. Engstrum Co., 451 Colyton Ave., $223,750.

REDLANDS, CAL.—Plans for $90,000 Polytechnic High School buildings were approved at a recent meeting of School Board. Within two weeks the plans will be ready for contractors and bidders.

TORONTO, ONT.—The Board of Management of Knox Church, Rev. John Somerville, Confederation Building, Toronto, Secy., is desirous of obtaining competitive plans for the proposed college buildings to be erected on St. George St. Plans must be sent in by Nov. 1.

WATER SUPPLY—IRRIGATION.

(* *denotes that this work is advertised in Engineering News.*)

PORTLAND, ME.—We are officially advised that the city will lay a new water main. A. L. T. Cummings is City Clk.

*HYDE PARK, VT.—Bids are asked until noon, June 15, by the Village Trustees for laying about 4.8 miles of water pipe. N. G. Wood is Chn.

CHERRY VALLEY, MASS.—Bids will be received until June 13 by the city for the construction of water-works. Estimated cost, $75,000. Nathan E. Craig, of Spencer, is Engr.

GREENFIELD, MASS.—The Greenfield Fire District on May 24 voted to appropriate $75,000 for the construction of an underground concrete reservoir with a capacity of 2,000,000 gallons. Estimated cost, $29,480; of pipe line, $37,070. William S. Johnson, Boston, is Engr.

NEWTON, MASS.—We are officially advised that bids were received as follows on May 25 by the Metropolitan Water and Sewerage Board, 1 Ashburton Pl., Boston, for laying water pipes in Newton: James H. Fannon, Somerville, Mass., $30,862; CAVANAGH BROS., 471 Dorchester Ave., Boston, $36,056 (awarded contract); Bruno & Petitti, Boston, $36,483; Merrill-Ruckgaber Co., New York, $36,787; Coleman Bros., Boston, $38,005; Luke D. Mullen, Boston, $39,905; Joseph Hanreddy, Chicago, Ill., $40,541; Henry Spinach Contracting Co., Waterbury, Conn., $42,518; John J. Falvey, Somerville, $42,570.

NEW YORK, N. Y.—The FOX-HENNESSEY CO., 81 East 125th St., has been awarded contract for laying water mains in the city. Through a typographical error the address was given on May 26 as 81 East 12th St.

NEW YORK, N. Y.—Bids were opened by Benjamin B. Odell, Jr., and William E. Paine, receivers of the Thomas McNally Co., at Room 16, 16 Beaver St., New York, on May 26, for completing contract of the Gore-Meehan Co. for that part of Catskill Aqueduct, in Philipstown, as shown on the contract drawing of Contract 2, Peekskill Division. Two bids were received, one from the Metropolitan Construction Co., and the other from Hicks Johnston Construction Co.

NEW YORK, N. Y.—Bids are asked until 2 p. m., June 20, by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, for five portable meters such as can be inserted into any main through a 1-in. corporation cock and equipped with photo-recording attachments.

*NEW YORK, N. Y.—We are officially advised that contracts have been awarded by the Board of Water Supply, bids opened on May 24, as follows: Contract 44, furnishing, delivering and installing six 6-ft. by 15-ft. sluice gates, 25 5-ft. by 13-ft. sluice gates, four 5-ft. by 8-ft. back pressure sluice gates, seven 5-ft. by 8-ft. sluice gates, six 5-ft. by 6-ft. sluice gates, three 4-ft. by 5-ft. sluice gates, eight 3-ft. by 5-ft. sluice gates, three 30-in. by 42-in. sluice gates, two 18-in. by 24-in. sluice gates, with operating mechanisms, two sets of drive shafting and all appurtenances, complete, at Ashokan, Kensico and Hill View reservoirs, and in various structures along Catskill aqueduct, to CALDWELL WILCOX CO., Newburgh, N. Y.; Contract 80, construction of Breakneck tunnel, portion of Hudson River division of Catskill aqueduct, comprising about 710 ft. of plain concrete conduit known as acqueduct in open cut, or cut-and-cover aqueduct, 17 ft. high by 17 ft. 6 ins. wide inside, and a tunnel on the hydraulic gradient about 1,055 ft. long, 17 ft. high by 13 ft. 4 ins. wide inside, connecting by a shaft about 590 ft. deep with a deep pressure tunnel 14 ft. inside diameter and about 700 ft. long, work located in the towns of Fishkill, Dutchess County, and Phillipstown, Putnam County, N. Y., to DRAVO CONTRACTING CO., Lewis Block, Pittsburg, Pa. List of bidders noted last week.

SPENCERPORT, N. Y.—Bonds for $40,000 have been sold for the construction of water-works. Bids for construction will be received until June 21. Morrison & Farrington, Dillaye Bldg., Syracuse, are Engrs.

BLACK RIVER, N. Y.—Bonds for $20,000 have been sold for the construction of water-works improvements. J. P. Brownell, of Carthage, is Engr.

SARANAC LAKE, N. Y.—Bids will probably be received in July for laying water mains. Estimated cost, $28,000. John L. Collins, of Saranac Lake, is Engr.

BUFFALO, N. Y.—The Council on May 25 approved the ordinance for an issue of $500,000 of bonds to continue new water-works construction.

NIAGARA FALLS, N. Y.—WILLIAM RUFAN has been awarded contract at $6,551, for the construction of water main extensions at the north end of the city, extensions to start on Sugar St. and extend to Lafayette St. and thence to Main St. F. G. Ward is Comr. Pub. Wks.

*ATLANTIC CITY, N. J.—Bids will be received until 2.30 p. m., June 28 by the Board Water Commissioners for erecting a new pumping station at Absecon. L. Van Gilder is Engr. and Supt.

*PITTSBURG, PA.—Plans and specifications are on file at the office of Engineering News, New York, for the construction of a steel water storage reservoir of 150,000 to 175,000 gallons capacity. Bids are asked until June 15. Samuel E. Duff, Consulting Engr., 706 Empire Bldg., Pittsburg.

*TYRONE, PA.—Plans and specifications are on file at the office of Engineering News, New York, for the construction of a storage reseroir; also for an addition to its present reservoir known as No. 1. It is estimated that there will be about 100,000 cu. yds. of earth work, about 2,000 cu. yds. of paving, masonry, etc., and about 17 acres of grubbing and clearing and about 7,000 cu. yds. of puddle work. Plans, specifications and information can be obtained at the office of the company after May 27. Bids are asked until June 10.

BALTIMORE, MD.—See item under Light and Power Plants.

MT. JACKSON, VA.—The city has awarded contract to KNEISELEY BROS., Woodstock, Va., for the construction of a gravity system of water-works of 500,000-gallon capacity. Estimated cost, $12,000.

FAIRMONT, W. VA.—The city will expend $75,000 to improve the water-works system, construct new lines, move pump station and bridge. S. B. Miller is Engr.

WHEELING, W. VA.—The Wheeling Traction Co., T. H. Conderman, Pres., will erect a pumping station at power plant and will improve the present system at the plant, doubling present capacity, building to be 20 × 50 ft., brick. A. G. Mershing is Constructing Engr.

ASHBORO, N. C.—See item under Sewers.

ASHEVILLE, N. C.—The city has awarded contract to EDMUND T. SEXTON, of New York, for water-proofing 5,000,000-gallon concrete reservoir, total surface of 36,000 sq. yds. on inside of reservoir, at $5,000.

TIMMONSVILLE, S. C.—J. Newton Johnston, of Florence, has been selected to prepare plans for water-works and a sewer system and desires price on tower, tanks, steam pumps and motor-driven pumps.

CHESTER, S. C.—The Public Works Committee of the City Council has awarded to the ROBERTS FILTER MFG. C., Darby, Philadelphia, Pa., the contract to furnish and install the filters in the new city water plant at $3,300.

GAFFNEY, S. C.—The city will receive bids until June 15 for furnishing about nine miles of 6 to 12-in. c.-i. pipe, fittings, hydrants, valves and boxes, erecting pumping station and filtration plant complete, including electrical machinery, heating plant, hydraulic connections, etc.; J. N. Lipscomb is Chn. Bd. Pub. Wks. William W. Lyon is Consulting Engr., 303 Duval Bldg., Jacksonville, Fla.

WRIGHTSVILLE, GA.—Bonds for $25,000 have been sold for the construction of water-works. Contract will be let as soon as plans are completed. Arthur Pew, of Atlanta, is Engr.

DADE CITY, FLA.—See item under Sewers.

ORLANDO, FLA.—The cost of the proposed water-works system has been estimated at $100,000. J. O. Freis, of Orlando, is Engr.

GRACEVILLE, FLA.—The city has voted $14,000 of bonds for the construction of water-works.

McKENZIE, TENN.—The city has voted $20,000 of bonds for extension of water-works and street paving. J. D. Herron is Mayor.

CLIFTON (Newport post-office), KY.—Contract for water-works improvements, bids opened on May 23, has been awarded to JOSEPH G. HERMANN, of Newport, at $10,115. W. L. Glazier, of Newport, is Engr.

ANDOVER, OHIO.—The citizens on May 23 voted to issue $24,000 of bonds for the construction of water-works. L. E. Chapin, of Canton, is Engr.

FRANKLIN, OHIO.—John W. Hill & Son, of Cincinnati, Ohio, have been selected to prepare plans for the improvement of the water supply system.

WAUSEON, OHIO.—Bids are asked until 1 p. m., June 11, by the Trustees of Public Affairs for furnishing one duplex air-compressor for water lift. Grace B. Burr is Clerk.

SOUTH BEND, IND.—The water-works system will be entirely rebuilt this year. Estimated cost, $50,000. Thomas H. Ayres is Supt. W.-Wks.

SOUTH BEND, IND.—Contract for sinking 20 additional artesian wells at Leeper Park has been awarded by the Water Board to ROBERT H. KERSEY.

*HAMMOND, IND.—The Board of Public Works will receive bids until 10 a. m., June 15, for the extension of the water supply intake in Lake Michigan, to include the furnishing and laying of approximately 3,000 lin. ft. of 42-in. c.-i. hub and spigot pipe weighing 450 lbs., per ft., furnishing and setting the strainer head at the outer end of said intake and connecting the inner end of said intake pipe line with the two present intakes by means of one branch of about 200 lin. ft. of 30-in. pipe weighing 250 lbs. per ft. and another branch of about 400 lin. ft. of 20-in. c.-i. hub and spigot pipe weighing 150 lbs. per ft., and to furnish all pipe fittings, lead, jute and other necessary materials and lay same in place complete and ready for use and make connections to present intake pipes without interruption of supply of water to pumping station. All as provided for in the plans, profiles, specifications and details now on file in the office of the Board of Public Works.

BLOOMINGTON, IND. — The Board of Trustees of the University of Indiana has awarded contract for constructing the dam to NORRIS DEFREES & SON, of Indianapolis, and for the reservoir to J. A. PIKE, of Bloomington. Bids were opened on May 23.

DETROIT, MICH.—Bids will be received until June 14, by the Board Water Commissioners, Benjamin F. Guiney, Secy., for furnishing 1,500 1-in. and 5,000 ⅝-in. corporation cocks, etc.

JACKSONVILLE, ILL.—Contract for laying water pipe to connect the city mains with the Widenham-Daub wells was awarded on May 26 by the City Council to the JACKSONVILLE HEATING & PLUMBING CO.

ROSSVILLE, ILL.—The town will construct a new water-works plant. Estimated cost, $4,000.

DOWS, IOWA.—Contract for extension to water-works, bids opened on May 25, has been awarded to the DES MOINES BRIDGE & IRON CO., of Des Moines.

RAYMOND,. MINN.—Bids will be received by the village until June 13 for constructing water-works. Estimated cost, $6,000. Rovat & Bennett, of Willmar, are Engrs.

ST. PAUL, MINN.—The Water Board on May 27 decided to lay 12,870 ft. of 6-in. water pipe in various streets. L. W. Rundlett is City Engr.

FORT LEAVENWORTH, KAN.—Bids are asked until 10.30 a. m., June 30, by Maj. Thomas H. Slavens, Constructing Q. M., U. S. A., for furnishing approximately 85 tons soil pipe and fittings, 1,600 brass cocks, 795 non-syphoning basin traps, 10,000 ft. w.-i. pipe, with fittings.

BEATRICE, NEB.—We are officially advised that on May 31 the citizens voted to issue $70,000 of bonds for improvements to the water-works, and electric light system. Estimated cost, $70,000. W. K. Palmer Co., Dwight Bldg., Kansas City, Mo., are Engrs.

TYNDALL, S. DAK.—See item under Light and Power Plants.

COKEVILLE, WYO.—Contract for the construction of the Covey Canal, near Covey, to include 75,000 cu. yds. earth excavation and 2,000 cu. yds. loose and solid rock excavation, has been awarded to E. J. FISHER, of Rock Springs, Wyo., at 14½ cts. per cu. yd. for earth excavation; loose rock, 50 cts., and solid rock, $1. W. Newbrought, of Evanston, is Engr.

VALENTINE, TEX.—Tuttle & Pike, Shubert Theatre Bldg., Kansas City, Mo., are preparing plans for a sub-irrigation system for Valentine.

DEL RIO, TEX.—The Del Rio Water Co. will construct a reservoir of 1,000,000 gallons capacity and make other improvements to its system.

HARINGEN, TEX.—A municipal water-works plant is to be installed here. A bond issue will be voted for the purpose.

FRANCIS, OKLA.—The Federal Utility Corporation will construct a water-works and electric light plant here and will sell at private sale $50,000 of bonds for the purpose. W. L. Bell, 200 Olive St., Kansas City, Mo., is interested.

CHEROKEE, OKLA.—The city has engaged Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., as engineers in charge of the completion of water-works system.

KERSEY, COLO.—See item under Light and Power Plants.

GREELEY, COLO.—Capitalized at $100,000, the Pawnee Irrigation Co. has been organized and incorporated. It plans to use the water of Pawnee Creek, a tributary of the South Platte River, to provide irrigation for tracts in Weld, Larimer and Logan Counties.

LA JUNTA, COLO.—We are officially advised that a company known as the Desert Land, Reservoir & Canal Co. has been formed, W. A. Colt, Pres., Las Animas, Colo., for the purpose of watering about 150,000 acres of land in Otero, Bent and Kiowa Counties. Plans include utilizing Meredith Lake as a reservoir, with a capacity of 300,000 acre-ft., and the construction of an inlet canal 17 miles long from the Arkansas River, inlet canal to be 150 ft. wide on bottom, and with a depth of 15 ft. From this lake a system of canals will conduct the water to the lands. Contract for about 15 miles of this work has been let and one mile completed. F. T. Lewis is Ch. Engr., La Junta.

TACOMA, WASH.—The KEASAL CONSTRUCTION CO., Provident Bldg., Tacoma, has been awarded contract for c.-i. water mains in Portland Ave., 26th to 35th Sts., at $21,202.

SEATTLE, WASH.—Preliminary surveys are being made for a new and larger dam of concrete or granite, 75 ft. high, across Cedar River, below the outlet of Cedar Lake. Estimated cost about $1,000,000.

R. H. Thomson, City Engr., estimates the cost of constructing a water main in 22d Ave. at $4,750.

EUGENE, ORE.—Bonds for $60,000 have been voted for the construction of a filter plant.

SALEM, ORE.—John T. Whistler, Engr., in an extended report to the Mayor and the City Council, estimates the cost of a mountain water system with a distributing capacity of 10,000,000 gallons a day, at $1,430,000. This contemplates the Little North Fork of the Santiam River as a source of supply. The cost of maintenance is given at $115,900 per annum. The cost of building a line to the Breitenbush River is estimated at $1,780,000 and with a capacity of 15,000,000 gallons a day. For a filtered system from the Willamette River an estimate is made of $1,245,000 for distributing 10,000,000 gallons a day. The estimated annual cost of operating the Breitenbush system is $133,000, and the Willamette River filtered system $109,650. All estimates of the cost of these systems includes an item of $425,000 for the purchase of the holdings of the present company. The engineer recommends the Santiam River as the best and cheapest source of supply.

WILLOWS, CAL.—The Sacramento Valley Irrigation Co., Willows, will let contracts in about two months for lateral and drain construction, involving about 1,200,000 cu. yds. In the Fall, about 400,000 cu. yds. of reconstruction work on the upper 20 miles of the Central canal will be contracted for. At this point the canal is from 50 to 65 ft. wide.

OAKLAND, CAL.—Contract for the extension of the pipe system of the salt-water fire-fighting plant has been awarded to MICHAEL MURPHY at $23,353. The work is to be begun immediately.

CARSON CITY, NEV.—The Secretary of the Interior has authorized the Reclamation Service to erect a permanent structure for discharging water from the end of the main Truckee canal, Truckee-Carson irrigation project, Nevada, in the Carson River. The necessary service in this connection has been performed by a temporary wooden chute erected in 1905. The adoption of a permanent form of chute and the development of detailed designs has been postponed pending definite action with reference to the proposed lease for the development of power at the chute. Estimated cost, $25,000.

GALT, ONT.—The by-law authorizing $5,000 for extension to the water-works was carried on May 20.

COLDWATER, ONT.—Bids are asked until 6 p. m., June 18, by J. R. Russell, Clk. Council, for the construction of water-works. Contracts for the following work will be let separately or together; Contract (A) c.-i. supply main and distribution system; Contract (B), ground, reservoir, collecting pipes and drains. Plans and specifications may be seen and form of proposal obtained at the office of the John Galt Engineering Co., Toronto, Ont., from whom all information may be obtained.

SEWERS.

(* *denotes that this work is advertised in Engineering News.*)

*WESTFIELD, MASS.—We are officially advised that bids were received as follows on June 1 by the town for constructing sewers, the work including 4,860 ft. of pipe sewer from 6-in. to 20-in. in diameter with manholes and catch-basins; E. M. DENOON, Springfield, Mass., $6,515 (awarded contract); Lopaydo & Way, Springfield, $6,560; E. B. Roberts, Boston, $6,574; D. A. Dovey, Natick, Mass., $6,638; Fred T. Ley & Co., Springfield, $7,069. Oren E. Parks is Town Engr.

BOSTON, MASS.—JAMES F. MURPHY, 269 Kilton St., Dorchester, has been awarded contract at $7,696 for the construction of sewers in Lucerine and other streets. Bids were opened on May 28.

McCARTHY & WALSH, 484 Saratoga St., East Boston, have been awarded contract for the construction of a sewerage works in Gainsborough and St. Botolph Sts., Roxbury, at $5,181.

Bids will be received until June 15 by the Metropolitan Water and Sewerage Board, Boston, Henry H. Sprague, Chn., for constructing about 6,000 ft. open channel, 3,450 ft. 33 × 33-in. concrete drain, 960 ft. 24-in. vitrified clay pipe drain, etc., in Framingham, Natick and Wayland.

WATERBURY, CONN.—Bids for the construction of drains in Division and Farm Sts. will be received by the Board of Public Works until 8 p. m., June 14. R. A. Cairns is City Engr.

NEW YORK, N. Y.—Bids are asked by George McAneny, Pres. Boro. of Manhattan, until 2 p. m., June 9, for furnishing all the labor and materials required for the outlet sewer and appurtenances under pier at foot of 40th St., North River.

BUFFALO, N. Y.—Bids will be received until June 10 by F. G. Ward, Comr. Pub. Wks., for constructing tile sewers in portions of Elmwood and Fillmore Aves., Argus and Halbert Sts., requiring 36-in. brick sewer and 20 to 10-in. tile sewer.

EAST ROCHESTER, N. Y.—Bids are asked until 8 p. m., June 14, by the Board of Trustees at the office of Claude C. Hagerty, Village Clk., for extensions to sewer and water systems, including 3,352 lin. ft. of 6-in. and 980 ft. of 4-in. water main, and 730 lin. ft. of 6-in., 1,740 lin. ft. of 8-in., and 374 lin. ft. of 10-in. sewer pipe, together with laterals, manholes, air inlets, etc.

HACKENSACK, N. J.—Bids were opened on May 27 by the Hackensack Improvement Commission for the construction of sewers in (a) Central and Railroad Aves., and (b) Old Hoboken Road. The lowest bidders follow: (a) Ernest Abraham, Hackensack, $7,699; (b), Di Napoli & Toriello, Ridgefield Park, N. J., $3,061.

CAMDEN, N. J.—Bids will be received by E. Francis, Chn. Com. on Streets and Highways, until 8 p. m., June 21, for furnishing material and labor for performing the following work: For curb, gutter and crossing stones, paving and repaving material furnished and delivered or work performed from July 16, 1910, to July 16, 1911; for inlets, sewer pipes, traps, manholes, heads and covers and manholes, material furnished and delivered or work performed from July 16, 1910, to July 16, 1911; for cleaning sewers, from July 16, 1910, to July 16, 1911; for repair of brick and cement sidewalks and paving new sidewalks from July 16, 1910, to July 16, 1911, also for the construction of the following sewers in and along Morgan St., from Master St. to Sixth St., along Sixth St. to Woodland St., on Woodland St. to Broadway, and on Fairview St., from Sixth St. to Broadway, and on Linden St., from Eleventh St. east.

*WESTFIELD, N. J.—Contract was awarded by the city on June 2 to JOHN McNABB, of Bound Brook, N. J., for constructing sanitary sewers here, at $9,137.

NATRONA, PA.—See item under Streets and Roads.

WEST VIEW, PA.—The borough has had plans prepared by Trimble & Moller, Engrs., 435 Fourth Ave., Pittsburg, for a sewage disposal plant and sewer system. Bids are asked until July 1 by H. L. Donaldson.

PHILADELPHIA PA.—The plans submitted by the city authorities for a sewage disposal plant for that portion of the northeastern section of the city included in the Pennypacker Creek Valley, have been approved by the State Health Commissioner. George R. Stearns is Dir. Pub. Wks.

CENTERVILLE, MD.—The city has voted bonds for the construction of a sewer system.

*BALTIMORE, MD.—We are officially advised that bids were received by the Board of Awards at the office of J. Sewell Thomas, City Register, on May 25 for the constructing sanitary lateral sewers in Dist. 19-A and certain sewers in Dists. 19-B, 21 and 35. The bids follow for lateral sewers in District 19-A: William McCarthy & Co., Pittsburg, Pa., $105,878; B. F. Sweeten & Son, Baltimore, $110,005; D. V. Ault & Co., Baltimore, $122,639; Irwin Bros., Baltimore, $135,654. Calvin W. Hendrick is Ch. Engr., Sewer Comn., American Bldg.

BALTIMORE, MD.—Bids are asked by the Board of Awards at the office of T. Sewell Thomas, City Register, until 11 a. m., June 15, for constructing sanitary lateral sewers in District 25 and certain sewers in District 27. Calvin G. Hendrick is Ch. Engr. Sewerage Comn.

*WASHINGTON, D. C.—Bids are asked by the District Commissioners until 2 p. m. June 20, for sewers in the district.

ASHBORO, N. C.—The city will expend $50,000 to construct a sewerage and water-works system.

TIMMONSVILLE, S. C.—See item under Water Supply—Irrigation.

SAVANNAH, GA.—Chatham County Commissioners have authorized the construction of a reinforced concrette drain in De Renne Canal from Waters Road to canal's outlet in Casey Canal, a distance of 3,300 ft. Estimated cost, $20,000.

DADE CITY, FLA.—A special committee has been appointed by the Board of Trade to engage an engineer to submit a complete report by June 13 on the constructing of a sewerage and water-works system.

HARTFORD, KY.—The City Council has awarded contract for the construction of a sewer system to FRANK MAY, of Hartford, at $13,014. Bids were opened on May 19.

*LOUISVILLE, KY.—Specifications are on file at the office of Engineering News, New York, for the construction of Sections "C" and "D" Northeastern Sanitary Trunk Sewers. Contracts 69 and 70. Bids are asked until June 10.

JEFFERSON, OHIO.—Bids will be received about July 1 for the construction of sewers here. F. M. Miller is Village Clk.

BELLEFONTAINE OHIO—FRANK S. MITCHELL, of Bellefontaine, has been awarded contract for the construction of the South Main St. sewer, at $32,809.

NILES, OHIO.—The Board of Public Service has had plans completed for an intercepting sewerage disposal plant. Estimated cost $75,000. F. M. Brewer is City Engr.

CLEVELAND HEIGHTS, OHIO.—Bids are asked until noon, June 14, by H. H. Canfield, Village Clk., for furnishing necessary labor and material for the construction of sewers in Maple Road, from Mayfield Road to Wood Road.

KENTON, OHIO.—We are officially advised that the city proposes to construct sewer work. R. B. Thompson is Supt. Sewerage. O. P. Wilson is City Engr.

GARY, IND.—J. J. HAYNE has been awarded contract for the construction of a sewer in this city at $6,303. The work includes 746 ft. of 18-in., 750 ft. of 15-in. and 2,088 ft. of 12-in. pipe. Bids were opened on May 23.

EVANSVILLE, IND.—Plans are being prepared by Emil Pfafflin, City Engr., for 2,000 ft. of 5 × 12 ft. brick sewer for the West Side.

LAPORTE, IND.—Bids are asked by the Common Council until 7.30 p. m., June 13, for the construction of the Scott St. sewer. William E. Kruger is City Clk.

SOUTH BEND, IND.—The Board of Public Works, Arthur P. Perley, Clk., will receive bids until June 24 for overflow pipe sewer in East Wayne St., from Columbia St. to the St. Joseph River.

Bids on pipe sewer in East Wayne St., from Francis to Eddy Sts., will be received until 10 a. m., June 21.

Bids for a pipe sewer in Diamond Ave., from Van Buren Ave. to the north line of Cushing Addition, will be received until 10 a. m., June 21.

VINCENNES, IND.—Plans and specifications for a complete sewer system are now ready for bidders. Hering & Fuller, 170 Broadway, New York, are the Engrs. Estimated cost, $180,000. The plans provide for a double system, one for carrying the domestic and industrial refuse, while the second is for storm water. Pumping stations will be erected because the city is slightly elevated above the Wabash River.

GRAND RAPIDS, MICH.—The Common Council on May 31 decided to construct the first section of the proposed east side trunk sewer. It will extend from the Grand Rapids and Indiana crossing on Campau St., south through the city market and the McKee and Belden property to a point about 100 ft. below the present outlet of the Prescott St. sewer. Below the market for a considerable distance the sewer and concrete flood wall will be built as one, the sewer forming the base of the wall. Estimated cost, $375,000. L. W. Anderson is City Engr.

DETROIT, MICH.—Plans are being prepared by Robert H. McCormick, City Engr., for sewer work in Russell St., from Maple to near Napoleon Sts.; Trumbull Ave., from Selden to Calumet Sts., Ferry Ave., from Woodward to Russell Sts., and Harbaugh Ave., from Dearborn Road to near Cedar St. Estimated cost, $50,000. J. J. Haarer, Comr. Pub. Wks.

J. J. Haarer, Comr. Pub. Wks., has awarded contracts for the construction of lateral sewers to WILLIAM PORATH, 5 Rich St., Detroit, and JOHN GINZEL & CO., Buhl Bldg., Detroit.

SPRINGFIELD, ILL.—HENRY NELCH & SON have been awarded contract for the construction of the 18-in. sewer in South 15th St., from South Grand Ave. to Laurel St., at 64 cts. per ft. for the sewer, 35 cts. per lin. ft. for the inlet pipe and $24 for manholes.

ROCK ISLAND, ILL.—Bids are asked until 9 a. m., June 11, by the Board of Local Improvements for the construction of a sewer in Seventh St., from Fifth Ave. sewer to the Grant School on Eleventh Ave. and Seventh St. Wallace Treichler is Engr.

ROCK FALLS, ILL.—The city awarded general contract to FRANK A. TRAEGER, 201 First Ave., Sterling, Ill., for constructing a sewer here. J. D. Arey is Engr., Sterling.

GREENVILLE, ILL.—The city is having plans completed for the proposed sewer system. Estimated cost, $53,000.

CHARLES CITY, IOWA.—Bids will be received until June 13 by the City Council for constructing sewers in sundry streets. John S. Bradley is City Clk.

CRESTON, IOWA.—Bids are asked until 8 p. m., June 13, by J. F. Golden, City Clk., for sewering in Myrtle St. to Jefferson St., to connect from there with the main sewer in Adams St., sewer to be 6 ins. in size in Chestnut St., commencing at the alley north of Mills St., thence north to connect with the main sewer by manhole, and in Sumner Ave., commencing at the alley north of Mills St., thence north to Fuller St., to connect with the main sewer by manhole at Chestnut St.; these sewers to be 8 ins. in size.

EVELETH, MINN.—Bids for installing a sewer system in Douglas Ave., a pipe line in Carrie Ave. and sewer system in Pierce St. were opened on May 20 by the city. Contract has been awarded to the NORTHERN PLUMBING & HEATING CO., of Eveleth.

HIAWATHA, KAN.—Plans for a storm water sewer and for improvements to the electric lighting system are being prepared by Tuttle & Pike, Shubert Theatre Bldg., Kansas City, Mo.

NICKERSON, KAN.—Dunkin & Fox, of Hutchinson, Kan., have been selected to prepare plans for the construction of a sanitary sewer system here.

OSAGE CITY, KAN.—Bids were opened on May 24 for construction of sewers from plans of Burns & McDonnell, Scarritt Bldg., Kansas City, Mo. Contract has been awarded to BOYD CONSTRUCTION CO., of Kansas City, Kan., at the following prices: 32,899 lin. ft. 8-in. vitrified sewer pipe, 20 cts.; 4,089 lin. ft. 10-in. sewer pipe, 28 cts; 2,292 lin. ft. 12-in. sewer pipe, 35 cts.; 15-in. sewer pipe, 50 cts.; 11,097 cu. yds. excavation, 6-ft. deep, 20 cts.; 12,445 cu. yds. excavation, 6 to 8 ft. deep, 25 cts.; 7,851 cu. yds. excavation, 8 ft. to 10 ft. deep, 30 cts.; 3,100 cu. yds. excavation, 10 to 12 ft. deep, 45 cts.; 4,350 cu. yds. excavation, 12 to 14-ft. deep, 85 cts.; 515 cu. yds. excavation, 14 to 16-ft. deep, 85 cts.; 992 6-in. on 8-in. Y's, each, 50 cts.; 84 6-in. on 10-in. Y's, each, 60 cts.; 71 manholes, each, $40; 25 flush tanks, each, $70; 1,945 cu. yds. rock excavation, $2.65; 1,892 cu. yds. excavation, 60 cts.; 306 cu. yds. concrete, $9; 8,240 lbs. reinforcing steel, 3 cts.; 800 lbs. structural steel, 3 cts.; 8 manhole castings, each, $7; 48 manhole steps, each, 40 cts.; 1,400 ft. 4-in. drain tile, 7 cts. Total $40,940. Other bids were: McGuire & Stanton, Leavenworth, $42,117; Tonkawa Construction Co., Tonkawa, Okla., $43,154; Johnson & Hyatt, Sedalia, Mo., $42,716; Freeborn Engineering Construction Co., Kansas City, Mo., $42,078.

O'NEIL, NEB.—Bids are asked until 8 p. m., June 14, by H. J. Hammond, City Clk., for necessary material and labor for the construction complete of a sanitary sewer system. Consolidated Engineering Co., 640 Bee Bldg., Omaha, Neb., are Engs.

HARTINGTON, NEB.—Bids will be received by the City Clerk until June 14 for the construction of about three miles of sanitary sewers from the plans of Skeels & Beck, Grain Exchange Bldg., Sioux City, Iowa.

CRETE, NEB.—Bids are asked until 2 p. m., June 20, by F. A. Novak, City Clk., for the necessary labor and material for the installation of a sewer system here. The sewer system to consist of 19,071 lin. ft. of 8-in. pipe sewer; 10,376 lin. ft. 10-in. pipe sewer; 5,776 lin. ft. 12-in. pipe sewer; 4,983 lin. ft. 30-in. pipe sewer. P. A. Edquist, 832 New York Life Bldg., Omaha, Neb., is Engr.

ABERDEEN, S. DAK.—Contract for constructing 5,000 ft. of pipe and 13 manholes, bids opened on May 23, has been awarded by the city to J. J. DUNNEGAN, of Shenandoah, Iowa, at $16,000.

MISSOULA, MONT.—Bids will be received about July 1 for the construction of a sewer system from the plans of Swearingen & McCulloh, of Missoula.

SPRINGFIELD, MO.—The city proposes to construct a septic tank at the mouth of the city sewer, on the south side, with a daily capacity of 3,000,000 gallons.

*ST. LOUIS, MO.—The Hogan Construction Co., 2712 Wyandotte St., St. Louis, submitted the lowest bid to the city on May 17 for constructing brick and concrete sewer, Baden public sewer, first section. Estimated cost, $256,000. H. R. Fardwell is Sewer Comr.

DAVENPORT, WASH.—O. A. Wiele, of Spokane, is preparing plans for sewers here. Estimated cost, $10,000.

SAN FRANCISCO, CAL.—The Metropolis Construction Co. has submitted the lowest bid to the city for constructing the sewer in Seventh St., at $165,000. Marsden Manson is City Engr.

VENTURA, CAL.—Olmsted & Gillelen, Wright & Callender Bldg., Los Angeles, have been selected to prepare plans for a sewer system here.

PORTERVILLE, CAL.—The citizens on May 17 voted to issue $40,000 of bonds for sewer and street improvements. Irvin H. Althouse, of Porterville, is Engr.

SONOMA, CAL.—The citizens here voted $20,000 of bonds for the construction of a municipal sewer system.

SALT LAKE CITY, UTAH.—Bids will be received until June 17 by the Board of Public Works, H. G. McMillan, Chn., for constructing pipe sewers in sewer extensions Nos. 246 and 251.

BRANDON, MAN.—We are officially advised that the city proposes to construct lateral sewers, street paving and lay water-mains. R. E. Speakman is City Engr.

GARBAGE DISPOSAL.

SARANAC LAKE, N. Y.—R. H. JOHNSON has been awarded contract for garbage collection for the next five months in the village, at $1,350.

The street sprinkling and cleaning contract was awarded to FRED WILLIAMS, low bidder, at $1,280.

LONG ISLAND CITY (L. I.), N. Y.—Bids were received on June 1 by Lawrence Gresser, Pres. Boro. of Queens, for the final disposition of garbage in the Fifth Ward of the Borough of Queens of the City of New York, during the months of June, July, August and September, 1910, and furnishing and operating the necessary dumps, scows, tugs, tools, appliances and labor therefor. Five bids were received for the work as follows: George N. Winkler, $9,945; Richard L. Russell, $13,330; Charles P. Frey, $13,735; Bouker & Schultz, $17,000; Peter V. Vreeland, $9,900.

MOUNT VERNON, N. Y.—The mayor has approved the addition of ten years to the contract of FRANK NORDONE, garbage contractor, with an annual increase of $500, which gives the contractor the contract for garbage collection for the next 13 years, and the right to erect a crematory in which only Mount Vernon garbage can be destroyed.

WEST HOBOKEN, N. J.—Bids are asked until 8 p. m., June 15, by the Town Council for the removal of ashes and garbage and rubbish, exclusive of all contractors' and manufacturers' materials, from the streets, lanes and alleys of the town, said garbage to be removed twice a week and beyond the limits of the town. John F. McMahon is Town Clk.

OAKLAND, CAL.—Bids are asked by the Board of Public Works until 10 a. m., June 15, for the receiving and carrying away from the city, garbage, waste matter and manure produced in the city.

STREETS AND ROADS.

(** denotes that this work is advertised in Engineering News.*)

TILTON, N. H.—The contract for macadamizing about 8,000 ft. of state road here has been awarded to B. J. JAQUITH, of Northfield, Mass.

LAWRENCE, MASS.—Bids are asked by A. D. Marble, City Engr., until 3 p. m., June 13, for paving Broadway and other streets.

NORWALK, CONN.—Bids will be received until June 14 by James J. Kenna, City Clk., 44 Wall St., for furnishing material and laying a vitrified block pavement on Wall St., requiring about 3,400 sq. yds. of pavement, etc.

NEW HAVEN, CONN.—The following contracts for improved pavement, bids for which were opened June 4, have been awarded by the Committee on Permanent Pavements: Dixwell Ave., from Broadway to Munson St., granitoid blocks, to RUDOLPH S. BLOME CO., 79 Dearborn St., Chicago, Ill., $22,080 and $260 extra for curbing; State St., from Chapel to Water Sts., wood blocks, to the U. S. WOOD PRESERVING CO., 165 Broadway, New York, $16,650 and $300 extra for curbing; Gregson St., from Chapel to Crown Sts., granitoid blocks, RUDOLPH S. BLOME CO., $1,720 and $75 extra for curbing; portions of State St. and Congress Ave., granite blocks, to A. J. LANGEGELD, Hartford, Conn., $3.49 per sq. ft.; Congress Ave., from Hill to Lafayette St., wood blocks, U. S. WOOD PRESERVING CO., $9,464.

WATERBURY, CONN.—One bid was received for macadamizing Hamilton Ave., that of Edward McManus, of Waterbury, Conn., whose figure was $1.29½ per sq. yd. As the price obtained exceeds the appropriation no award was made.

EAST HARTFORD, CONN.—Bids will be received until 8 p. m., June 16, by the East Hartford Fire District, E. E. King, Chn., for about four miles of sidewalks of flagstones, concrete or tar, with such curbing as is prescribed by the Committee.

ALBANY, N. Y.—The list of bids received on June 6 by the State Commissioners of Highways, at Albany, for repairing county highways, heretofore improved by state aid, will be given next week, together with the awards of contracts.

NEW YORK, N. Y.—Bids are asked by George Cromwell, Pres. Boro. of Richmond, until noon, June 14, for paving certain streets and paving materials.

George McAneny, Pres. Boro. of Manhattan, was empowered on June 3 at the meeting of the Board of Estimate to proceed with the widening of 42d St., between Park and Eighth Aves., by cutting down the sidewalk and with the removal of encroachments extending more than 2½ ft. beyond the building line. The removal of such encroachments will affect the Manhattan and Knickerbocker Hotels and the Republic Theater. The street will have a uniform width of 68 ft. when the improvement is done. The roadway of Fifth Ave. is also to be widened between 47th and 48th Sts. by cutting 7½ ft. of the easterly sidewalk.

The Borough President at the same time announced that he would seek authority to widen the roadway of 34th St., from 40 to 55 ft. from Park Ave. to the Hudson River and to widen the 23d St. roadway from Second Ave. to the Hudson River.

PENN YAN, N. Y.—CHARLES N. KELLY, of Penn Yan, has been awarded the contract for the paving of Elm St. He was the lowest bidder on the kind of brick required, Metropolitan. The bids on this brick were as follows: Charles N. Kelly, Penn Yan,, $13,640; McGreevey, Elmira, $13,780; Gray & Miller, Hornell, $14,043; Costello & Nagle, $15,464; R. W. Henson, Geneva, $13,829.

*PELHAM MANOR, N. Y.—Bids are asked by the Village Trustees until 8 p. m., June 13, for reconstructing about 6,200 lin. ft. of macadam streets, with stone gutters. Henry M. Babcock is Village Clerk.

NEW BRUNSWICK, N. J.—We are officially informed that about two miles of street work will be done here under the supervision of Abraham Jelin, Supt. of Streets. Fred Schneider is City Engr.

BELVIDERE, N. J.—The contract for constructing macadamized road from Buttzville to Belvidere, about 19,418 ft., has been awarded to SALMON BROS., Hackettstown, N. J., at $9,068. J. R. Thatcher, of Washington, N. J., is Dir. Bd. of Chosen Freeholders.

ELIZABETH, N. J.—The contract for constructing macadam roads in Union County has been awarded to the WELDON CONTRACT CO. as follows: Shunpike Road, 1½ miles long, at $37,000; Springfield Ave. and Turkey Road, two miles long, at $31,000. Jacob L. Bauer is County Engr., 130 Broad St., Elizabeth.

MILLVILLE, N. J.—We are officially advised that sidewalks and street paving will be laid here probably this summer. Joseph E. Smith is Mayor. E. Robbins is City Engr.

SOUTH ORANGE, N. J.—The contract for resurfacing 12,000 sq. yds. of paving and macadamizing 2,700 sq. yds. in South Orange has been awarded to LUDWIG BATT, of South Orange, at $15,000. Edmund R. Halsey is Township Engr., 164 Market St., Newark, N. J.

*SOMERVILLE, N. J.—We are officially advised that bids were received on May 26 by the Board of Chosen Freeholders at Somerville for grading and macadamizing seven roads in Somerset County, aggregating 15.18 miles. Joshua Doughty, Jr., 22 Elm St., Somerville, is Engr. The following contracts were awarded on May 31: MOBUS & BURKE, of Plainfield, N. J., Chester Road, at $6,436; Liberty Corner Road, First Section, $25,380; Liberty Corner Road, Second Section, $17,232; Watchung Road, $39,188. WILLIAM R. MOORE, of Far Hills, N. J., Greater Cross Roads, $20,813. SIGAFOOS & POORE, of Riegelsville, Pa., Blackwell's Mills Road, First and Second Sections, at $23,611 and $29,986, respectively.

MOUNT HOLLY, N. J.—Bids will be received until June 13 by Harry E. Dubell, Dir. Bd. of Chosen Freeholders, at Mount Holly, for constructing a gravel road of about 4.26 miles. Earl Thompson is County Engr., 11 East Central Ave., Moorestown.

*CAPE MAY C. H., N. J.—The contract for constructing eleven miles of seashore road, Second Section, extending from Crooked Creek, in Cape May, to Beasley's Point, has been awarded to ROBERT E. HAND at about $50,000.

CAMDEN, N. J.—See item under Sewers.

MECHANICSBURG, PA.—On May 31 the Councils awarded the contract for paving Main St., from the western boundary of the Irving College campus west of the eastern limits of the old cemetery, with vitrified brick, to the STRUCKER BROTHERS' CONSTRUCTION CO., of Harrisburg, Pa. at $1.97 per sq. yd. A resolution was passed providing for paving 20,000 sq. yds. of the street with brick and the remaining portion, amounting to 3,000 sq. yds., with asphalt macadam. The contract for the remaining 3,000 sq. yds., which under the resolution will be paved with asphalt macadam, will not be awarded for several months. The other bidders on the brick paving beside the successful bidders were: Central Construction Co., of Harrisburg, $1.65 per sq. yd. for Porter brick and 45 cts. per sq. yd. for a 4-in. concrete base; U. S. Wood Preserving Co., of New York, wooden blocks, $2.40 per sq. yd., including base; Reilyband Frick, Lancaster, patent shale blocks, $2.12 per sq. yd. and 67 cts. for base; Juniata Paving Co., Philadelphia, Warren bitulithic, $2.15, including base; Barber Asphalt Paving Co., Philadelphia, Trinidad asphalt, $1.97 with base; Hassan Paving Co., of Worcester, Mass., concrete Hassan paving, $1.70; Charles P. Eastburn, Yardley, amiesite paving, $1.60; William S. Martin, West Fairview, Mack block, $2.07 per sq. yd.

WILKES-BARRE, PA.—Bids are asked until noon, June 13, by F. H. Gates, City Clerk, for grading and paving with vitrified brick on a concrete foundation, and curbing with concrete or flagstone, Barnum Pl., between South and Ross Sts., in the Tenth Ward of the city of Wilkes-Barre.

SCRANTON, PA.—The Commissioners of Lackawanna County on Saturday awarded the contract for the paving of a road through Lackawanna County, from the Luzerne to the Susquehanna County line, to JOHN HARRIGAN, of Sidney, N. Y. The work when completed will cost about $375,000. Mr. Harrigan's bid for making the road of this material was $1.39 a sq. yd. The road is to average 30 ft. in width and will be a fraction more than 21 miles in length. The Scranton Railway Co. will stand the cost of paving inside its tracks and a foot each side of the track. This will leave the County the building of an average width of 22 ft. The company will build about 80,000 sq. yds. The base will be 5 ins. thick and of the best Portland cement. When the base is down the top will be laid. The topping will consist of New Jersey trap rock, each rock coated with Bermuda asphalt and crushed under a roller.

MONESSEN, PA.—Bids will be received until 6 p. m., June 10, by the Borough Council for grading, curbing and paving of Morgan Ave., from Tenth St. to Schoonmaker Ave., and Schoonmaker Ave., from the end of the present paving to the eastern borough line. Approximately, the proposed work consists of 2,700 lin. ft. of 6 × 24-in. stone curbing; 3,300 lin. ft. 5 × 22-in. stone curbing; 7,200 sq. yds. vitrified block paving; 8,000 cu. yds. excavation. C. B. Parkinson is Boro. Engr.; J. A. Sheetz is Chn. Sts. and Roads Com.

PITTSBURG, PA.—We are officially advised that bids were received on May 31, by R. J. Cunningham, County Controller, for improving the Clifton-Bridgeville Road and the Library Extension No. 2 Road in Allegheny County. The Clifton-Bridgeville contract is for a brick-surfaced road. It was awarded to the VICTOR CONSTRUCTION CO., 1514 Franklin St., for $59,562. The other contract, which is for a macadam road, went to NEALON & DAILY at $12,293.

Bids are asked until noon, June 24, by J. Cunningham, Controller of Allegheny County, for improving (a) Perryville Extension No. 1 Road, 1½ miles, and (b) Turtle Creek and Monroeville (Hill Route) Road, 2¼ miles.

NATRONA, PA.—Bids are asked until 7.30 p. m., June 13, by W. B. Wiant, Township Clerk, for grading, paving, curbing and sewering of Walnut St., from River Ave. to Oak Alley, Harrison Township.

PHILADELPHIA, PA.—Two bids were received on May 31 for the completion of the Torresdale Boulevard, from Second St. to Rhawn, and the South Broad St. Boulevard, from Moyamensing Ave. to the navy yard. The McNichol Paving & Construction Co., 19th and Westmoreland Sts., bid on the Torresdale work and Edwin H. Vare, Betz Bldg., on the South Broad St. project. The bids were taken at once to the office of the Mayor who announced his intention of letting the contracts soon. The contract for South Broad St. extension calls for a width of 300 ft., in place of 160 ft. as the road now stands. There is about $400,000 available for the work. For the Torresdale Boulevard there is $300,000 available. The bridges along the line have been built, and the work now required is a matter of filling and grading. There will be 1,000,000 cu. ft. of fill and 500,000 cu. ft. of cut.

Bids for repairs to streets were opened at the same time. These include streets upon which the Philadelphia Rapid Transit Co.'s tracks are maintained. The bidders included the Filbert Paving & Construction Co., the Barber Asphalt Paving Co., the Mack Paving & Construction Co., the Cunningham Paving & Construction Co., John B. Cummings, Jacob H. Young, M. & J. B. McHugh and David E. Mahon.

DOVER, DEL.—Bids are asked by William H. Walker, Pres. Street and Sewer Comn., until 7.30 p. m., June 11, for street paving. H. I. Beers, Jr., is Engr., Dover.

BALTIMORE, MD.—Bids are asked by the Board of Awards until 11 a. m., June 15, to grade, gutter and pave with macadam 26th St., from Eastern Ave. to a point about 1,153 ft. northward.

HICKORY, N. C.—Bids will be received by the Mayor and Board of Aldermen of the City of Hickory, until 3 p. m., June 14, for improving streets. The work will consist of about 26,000 sq. yds. of macadam, 10,000 sq. yds. of macadam, using tar or asphalt as a binder, 6,000 sq. yds. concrete sidewalks, 9,000 lin. ft. of combined concrete curb and gutter, 26,000 cu. yds. of grading.

KEY WEST, FLA.—Bids will probably be received about Aug. 15 for paving, to cost about $300,000. Material has not been selected. Hazlehurst & Anderson are Consult. Engrs., Atlanta, Ga.

LAKE CITY, FLA.—Bids will be received until June 20 by the Board of Public Works for about 3,000 sq. yds. of vitrified brick pavement laid flat.

McKENZIE, TENN.—See item under Water Supply—Irrigation.

MEMPHIS, TENN.—M. LARKIN & CO. were awarded the contract on May 24 by the City Commissioners for paving Neptune St., from East Georgia St. to McLemore Ave., with asphalt, for $22,450, and Galloway Ave., from Dixon St. to McLean Boulevard, for $12,263. Both bids were the lowest offered. Bids for paving South Orleans St., from Polk to Railroad, with gravel and from Tate to Polk with brick were opened and allowed to lie over.

COLUMBUS, OHIO.—Bids will be received at the office of the County Commissioners until noon, June 29, for the necessary labor and materials to improve the Westerville Road from the north corporation line of Linden to the Mifflin and Blendon Township line, a distance of 13,796 ft. The road will be improved with limestone and draining.

At the same time bids will be received for the improvement with limestone of the Jackson Pike from Greenlawn Ave. to the Frank Road east. Hugh K. Lindsay is County Engr. and John Scott is Clerk of the Bd. of County Comrs.

LIMA, OHIO.—Bids are asked until noon, June 21, by the Allen County Board of Turnpike Directors for improving roads in Auglaive, Bath, German, Jackson, Marion, Monroe, Perry, Richland and Spencer Townships. C. R. Phillips is Clerk.

ATHENS, OHIO.—Bids will be received at the office of the Commissioners of Athens County until noon, June 15, for grading and paving with brick 1.52 miles of road in Dover Township, under the provisions of the State Highway Law. Estimated cost of construction, $16,615. James C. Wonders is State Highway Comr., Columbus.

ST. CLAIRSVILLE, OHIO.—Bids will be received at the office of the Commissioners of Belmont County until noon, June 16, for grading and macadamizing 1.96 miles of road in Flushing Township, under the provisions of the State Highway Law. Estimated cost of construction, $16,869. James C. Wonders, Columbus, is State Highway Comr.

CAMBRIDGE, OHIO.—Bids will be received at the office of the Commissioners of Guernsey County, Ohio, until noon, June 17, for grading and macadamizing 0.58 mile of road in Millwood Township, under the provisions of the State Highway Law. Estimated cost of construction, $4,704. James C. Wonders is State Highway Comr., Columbus, Ohio.

CINCINNATI, OHIO.—The Public Service Director has awarded the contract for the paving of Ohio Ave. with wood block to RUSSELL & JENNISON at $28,154. The U. S. Wood Preserving Co. bid $23,908, but the Director held that its bid was not the lowest and best, declaring that the oil in the samples submitted was not of the proper standard. The contract for paving Oehler St. with wood block went to A. J. HENKLE at his bid of $3,657, according to teh Cincinnati "Times-Star."

ASHLAND, OHIO.—Bids are asked by the Trustees of Montgomery Township until noon, June 11, for construction of three miles waterbound limestone macadam and ¾ mile rolled gravel road improvements. Jay Wilson is Clerk.

NORWALK, OHIO.—Bids are asked until noon, June 13, by John E. Soisson, Dir. of Pub. Service, for paving Milan St. with slag.

HAMILTON, OHIO.—We are officially advised that bids were received by the County Commissioners on May 24 for the reconstruction and repair of the public roads known as the Lebanon and Oxford Turnpike from the Trenton Bridge over the Miami River eastwardly. J. E. Brate is County Audr. The contract has been let to IRWIN BROS., of Hamilton, at $25,477.

PORTSMOUTH, OHIO.—Bids were received as follows, it is stated, for paving Third St.: Concrete base and tar filler, Monroe & Sons, Portsmouth, Portsmouth block, $30,582; Kelly Bros., Peebles block, $31,194. J. A. Grimes, Portsmouth, Portsmouth block, $36,704; Kaps Bros., Portsmouth block, $32,088. Concrete base and sand filler, Monroe & Son, granite block, $29,761; Kelly Bros., Peebles or granite block, $29,347; Kaps Bros., Portsmouth block, $31,062. Gravel base, tar filler, Monroe & Son, Portsmouth or granite block, $27,914; Kelly Bros., Peebles or granite block, $28,526. Gravel base and filler, Monroe & Son, Portsmouth or granite block, $27,298; Kelly Bros., Peebles block, $26,884.

McConnel Ave., concrete base, tar filler, Kaps Bros., Portsmouth block, $5,292; J. A. Grimes, Portsmouth block, $5,885; Monroe & Son, Portsmouth block, $4,953; Kelly Bros., Peebles block, $4,956. Concrete base, sand filler, Kaps Bros., Portsmouth block, $5,127; Monroe & Son, Portsmouth block, $4,821; Kelly Bros., Peebles block, $4,725. Gravel base, tar filler, Monroe & Son, Portsmouth block, $4,524; Kelly Bros., Peebles block, $4,559. Gravel base, sand filler, Monroe & Son, Portsmouth block, $4,425; Kelly Bros., Peebles block, $4,329.

ELYRIA, OHIO.—Bids for improving Sixth St. were opened recently as follows: Asphalt Block Co., of Toledo, $17,496; Peters Bros. Paving Co., Cleveland, $16,054; Andrews Paving Co., Hamilton, $15,549.

WAPAKONETA, OHIO.—Bids will be received until June 12 by Fred A. Klippel, Clerk, for the necessary labor and material for paving Willipie St.

AKRON, OHIO.—KELLY & MARKLEY, of Pittsburg, have been awarded the contract for the paving of Arlington St. at the following figures: Stone curbing, $16,057; concrete, $15,581; vitrified brick, $16,743. The other bidders were: C. H. Watters, stone curbing, $17,110; concrete, $16,054; vitrified brick, $16,898. Wildes & Davidson, stone curbing, $17,927; concrete, $16,565; vitrified brick, $18,029. Vogt & Son, Canton, stone curbing, $17,927; concrete, $17,203; vitrified brick, $18,365.

SPRINGFIELD, OHIO.—Bids will be received at the office of the Commissioners of Clark County, at Springfield, until noon, June 23, for grading and macadamizing 2.50 miles of road in Springfield Township, under the provisions of the State Highway Law. Estimated cost, $12,021. James C. Wonders is State Highway Comr., Columbus, Ohio.

CLEVELAND, OHIO.—Bids will be received at the office of the Commissioners of Cuyahoga County, at Cleveland, until noon, June 18, for the following roads: For grading and paving with brick 5,517 ft. of road in Chagrin Falls Township, under the provisions of the State Highway Law. Estimated cost of construction, $28,580. For grading and paving with brick 3.4 miles of road in Parma Township, under the provisions of the State Highway Law. Estimated cost of construction, $67,861. James C. Wonders is State Highway Comr., Columbus, Ohio.

NEW PHILADELPHIA, OHIO.—Bids will also be received at the office of the Commissioners of Tuscarawas County, at New Philadelphia, until noon, June 22, for grading and paving with brick 1.85 miles of road in Mill Township, under the provisions of the State Highway Law. Estimated cost of construction, $28,166. James C. Wonders is State Highway Comr., Columbus, Ohio.

GREENFIELD, IND.—Commissioners of Hancock County are asking for bids until 10 a. m., June 30, for the construction of a gravel road. Charles H. Troy is County Audr.

SOUTH BEND, IND.—Bids are asked until 10 a. m., June 21, by the Board of Public Works, Arthur P. Perley, Clerk, for pavement on Diamond Ave., from Laporte Ave. to Michigan Ave.

GOSHEN, IND.—The contract for paving South Main St. has been let to H. F. BANTA by S. F. Spohn, Mayor. The contract calls for paving South Main St. with Postum brick before Aug. 1, for the sum of $26,463.

KENTLAND, IND.—At a special meeting of the County Commissioners held recently, a contract was let to JACOB ACKERMAN, of South Bend, Ind., for $62,200, for the construction of the recently elected system of macadam roads in Washington Township.

ANDERSON, IND.—The Commissioners of Madison and Delaware Counties will receive bids until 10 a. m., June 30, for the construction of a gravel road between Delaware and Madison Counties known as the Hiram W. Fasnot gravel road. W. I. Richards and Joseph W. Davis are County Audrs., respectively.

The Commissioners of Madison and Hancock Counties will receive bids until 10 a. m., June 30, for the construction of 18,480 ft. of gravel road on the line of Madison and Hancock Counties, known as the Harry Davis road. W. T. Richards and H. H. Troy are County Audrs., respectively.

PERU, IND.—Bids will be received until 10 a. m., June 16, by the Commissioners of Miami County for the construction of a macadam road in Peru Township. Charles Griswold is Audr.

We are officially advised that a quantity of street paving is to be done by the City of Peru, but no definite time has been set for receiving bids. Michael Horan is City Engr.

WABASH, IND.—Contracts for the construction of a gravel road on the line dividing Wabash, Huntington and Whitley Counties and a gravel road on the line dividing Wabash and Huntington Counties have been awarded to WILLIAM REFFERT, of Monroeville, Ind., at $11,909 and $19,111, respectively.

HIGHLAND PARK, MICH.—The special election held in the village of Highland Park, Mich., on May 19, D. T. Peterson, Pres., voted in favor of creosote blocks for paving Woodward Ave. John A. Mercier, Hammond Bldg., Detroit, probably will be awarded the contract at $145,102.

GROSSE POINTE FARMS, MICH.—The CENTRAL BITULITHIC PAVING CO., of Manistee, Mich., has a contract for 27,750 sq. yds. bitulithic.

IRONWOOD, MICH.—The contract for paving McLeod Ave., Aurora, Norfolk and Ayer Sts., about 20,000 sq. yds. of tar macadam, has been awarded to P. McDONNELL, of Duluth, Minn., at $40,039. Jacob Nelson is City Clerk.

MANISTEE, MICH.—We are officially advised that street paving, to cost about $20,000, is to be done here by day labor. George B. Pike is City Engr.

CHICAGO, ILL.—Bids for asphalt repair work were opened by the Commissioner of Public Works on May 27. Following were the bids received for resurfacing with a set price for binder and concrete: Barber Asphalt Paving Co., 143 Dearborn St., 76 cts. per sq. yd.; American Asphaltum & Rubber Co., 234 Michigan Ave., 77 cts.; Conway Paving Co., 98 cts.; Parker-Washington Co., 238 Washington St., 95 cts.; J. A. McGarry, 188 Madison St., 79 cts.

*WAUKEGAN, ILL.—Bids are asked until 8 p. m., June 16, by the Board of Local Improvement for improving County St. and McAlister Ave. Fred W. Buck is Pres.

MADISON, WIS.—Bids are asked until June 20 for improving University Ave. with 17,765 sq. yds. of sheet asphalt, 5,202 ft. of combined curb and gutter and 3,166 ft. of underground drains. John F. Icke is City Engr.

BELOIT, WIS.—Bids are asked until 2 p. m., June 16, by the Board of Public Works for improving various streets in Beloit. Robert R. Caldwell is City Engr., Beloit, and 135 Adams St., Chicago, where plans and specifications may be seen.

FORT MADISON, IOWA.—Bids will be received until June 16, by the City Council, for paving with vitrified brick block on a concrete foundation, pitch or ash filled joints, about 16,000 sq. yds. L. G. Kiel is City Clk.

CRESTON, IOWA.—Bids are asked until 8 p. m., June 13, by J. W. Reynolds, City Clerk, for paving and curbing Adams St., from South Lincoln St. to Stone St., with asphaltic macadam pavement and concrete curbing; for constructing sidewalks of Portland cement concrete, four and five inches thick. Theodore S. De Lay is City Engr.

HIAWATHA, KAN.—Tuttle & Pike, Shubert Theater Bldg., Kansas City, Mo., are Engrs. for the 23,000 sq. yds. of vitrified brick paving, bids for which are being received.

BATHGATE, N. DAK.—The contract for laying 7,500 ft. cement sidewalks has been awarded to HERMAN CAMPBELL, of Cavalier, N. Dak. B. P. Chopple is Supt. Trustees of Asylum for the Blind.

TRENTON, MO.—We are officially advised that GATES & HOLBROOK, of Kansas City, Mo., have secured contract for paving with brick High St., 16,465 sq. yds., at $1.96 per sq. yd., and curb, 39 cts. per lin. ft., complete. E. R. McCanne is City Engr.; R. T. Preston is City Clerk.

GALVESTON, TEX.—On May 23 the County Commissioners awarded contracts, according to the Galveston "News," for two main roads on the mainland paralleling the Santa Fe and Galveston, Houston & Henderson Ry. tracks, from the Brazoria and Harris County lines, at a total of $150,657. The contract for the two mainland roads, which are to be constructed under the $500,000 good roads bond issue were let to J. C. KELSO, of Galveston, the lowest bidder for an all-mudshell roadway, clearing and grubbind land not included in bid. The bid of J. C. Kelso on the main road along the Galveston, Houston & Henderson Ry., a distance of approximately 16 miles, was $71,112. The bid was an all-mudshell surface and base, and no bid was submitted on clearing and grubbing land. The Texas Grading Co., of Houston, submitted a bid of $71,144, not including clearing and grubbing of land. There were six bids received on this road work, four of them on the work complete and two on sections. W. D. Haden, of Galveston, bid $72,769, and Suderman & Dolson, of Galveston, bid $73,706.50. Although the county solicited proposals on crushed rock and gravel as a basis for the mudshell surfacing, they did not consider the rock and gravel. The Texas Grading Co. and the W. S. Hipp Construction Co. were the only contractors submitting propositions on crushed rock and gravel. The former's bid aggregated $96,696 on rock base and $88,056 on gravel base with mudshell surfacing. The latter's bid aggregated $100,983 on crushed rock base and $93,423 on gravel base.

J. C. Kelso's bid on the road from the Brazoria County line aggregated $79,537. The proposal was for an all-mudshell roadway, and clearing and grubbing land was not bid on. W. D. Haden, of Galveston, bid $81,288.60 on an all-mudshell surfacing. His bid did not include clearing and grubbing land. The Texas Grading Co., of Houston, was next lowest on all-mudshell, with a bid of $81,542. Suderman & Dolson, of Galveston, with a bid of $82,591, were next lowest, and Isaac Heffron, who bid $91,574, was the highest of the five bidders on this work.

The discussion of the advisability of paving the Boulevard from the north end toward the paving already laid, instead of waiting until the grade raising canal had been entirely brought to grade and paving could proceed from the point left off, seemed to favor the new recommendation made by the Chairman of the Boulevard Committee. G. E. Mann is County Judge.

NOWATA, OKLA.—Bids are asked by the City Clerk of Nowata, until 2 p. m., June 13, for constructing 38,442 sq. yds. of brick pavement, together with combined curb and gutter and storm sewers.

MUSKOGEE, OKLA.—The bids for improvement of Ninth St., from Elgin to Okmulgee St. and Eleventh St., from Elgin to Hartford St., recently received, are as follows: Ninth St., F. P. McCormick, $9,048; Dennis McNerney, $9,135; Heman Construction Co., $9,408. Eleventh St., Dennis McNerney, $9,083; F. P. McCormick, $9,119; Heman Construction Co., $9,485. Dennis McNerny agrees to use Trinidad Lake asphalt on the work if awarded the contracts. He agrees to finish the work within 60 days.

DENVER, COLO.—Bids were received on May 25 by the Board of Public Works for alley paving in District No. 21, which includes the twelve alleys lying between Humboldt and Gilpin Sts. and 13th and 14th Aves., Race and York Sts. and 11th and 13th Aves. and York and Josephine Sts. and Eleventh and Colfax Aves. There were two bidders for the contract, the National Construction Co., $16,781, and the Municipal Construction Co., $17,191.

KENT, WASH.—The City Council has awarded to CALHOUN & JOHNSTON the contract for the big paving district, at $37,522.

BLAINE, WASH.—The bid of THORSVIG & RILEY, of Everett, Wash., at $42,524, for paving six blocks on Washington Ave. and a portion of F St. with asphalt, has been accepted by the City Council.

OLYMPIA, WASH.—Bids will be received at the office of Highway Board, Olympia, Wash., until 2 p. m., June 21, for grading State Aid Road No. 2, Stevens County. W. P. Butler is Div. Engr., 226 Hutton Bldg., Spokane, Wash.

The State Highway Commission on May 27 awarded the contract for the construction of State Aid Road Nos. 19-73, from Ellensburg to Thorpe, to TINKER & TRAVERS, of North Yakima. The approximate cost is $15,365. The contract for the construction of Road No. 72 in Clallam County at an approximate cost of $28,000, was awarded to HARRY COVENTON, of Clallam Bay.

PASADENA, CAL.—We are officially advised that the city will expend about $200,000 for oil macadam roads, probably in July. J. S. Van Ornum is City Engr.

LOS ANGELES, CAL.—The FAIRCHILD-FILMORE-WILTON CO. has been awarded a contract by the Board of Public Works for improving Burlington Ave., at $26,981.

SAN JOSE, CAL.—The contract for the changes in Monterey Road, New Coyote Station, has been awarded to MONZINGO & KNOTT at $9,996.

COEUR D'ALENE, IDAHO.—The following bids were received on May 15 by City Council for paving, (a) Sherman St., (b) Improvement District No. 8, (c) Improvement District No. 9, (c) Improvement District No. 10, (e) Improvement District No. 11: INLAND EMPIRE HASSAM PAVING CO., Spokane Wash., (a) $61,213, (b) $44,589, (c) $36,976, (d) $14,238, (e) $5,659 (awarded contract); Bloom & Co., (a) $66,962; Murphy & Co., (a) $66,962, (b) $61,737, (c) $52,282, (d) $20,275, (e) $8,221; C. M. Baine, (b) $41,995, (c) $36,995, (d) $14,245, (e) $6,745; Smith, Root & Boyle, (b) $39,500, (d) $13,000; Wetzel & Foster, (b) $47,333, (c) $37,927, (d) $15,138, (e) $6,100; Joslin & Hamley, (c) $35,921, (e) $6,200.

BRANDON, MAN.—See item under Sewers.

MANUFACTURING PLANTS.

(* *denotes that this work is advertised in Engineering News.*)

PORTLAND, ME.—The West End Realty Co., which represents the A. H. Berry Shoe Co., it is stated, will build a shoe factory at Lowell and Cherry Sts. in the western part of the city. The permit for the structure was issued on May 25. The specifications call for a building 150 ft. long by 50 ft. wide, of three stories and basement, with a tower 30 × 30 ft. The building will be of brick with concrete foundations. There will be a power-house separate from the main building.

LAWRENCE, MASS.—The Boston & Maine R. R. Co. will expend nearly $1,000,000 upon its property in this city during the coming summer. New tracks will be laid in the Andover St. freight yard, and a round-house for the housing of the engines in this city will be built, at an approximate cost of about $100,000. Workmen began early this spring removing the hill and ledge east of the Union St. ledge for the purpose of building a freight yard which will be used as a storage for cars in transit, and also for cars to be unloaded in this city. The freight yard will comprise 54 tracks, making room for the storage of 1,500 freight cars. The engine house will be of brick and will be built just south of the Union St. bridge. It will have a capacity of 48 engines. Besides being utilized as a storage for engines a fully equipped machine shop will be installed, and many of the repairs on engines which are now necessarily made at the Somerville shops will be made in Lawrence. It is possible that considerable of the work now performed by the machinists in the Somerville shops will be transferred to this city. H. Bartlett, Boston, is Gen. Supt. Mechanical Dept.

PLATTS MILLS (Waterbury post-office), CONN.—Estimates are being taken for the factory to be erected at Platts Mills for the Bristol Co. It will be three stories, brick, 48 × 100 ft., with bluestone trim, tar and gravel, roof, steam heat, elevator, sprinklers, etc. Griggs & Hunt, 51 Leavenworth St., Waterbury, are Archs.

SCHENECTADY, N. Y.—Announcement was made here on June 1, according to press reports, by the Schenectady Board of Trade that the Clougher syndicate of London, England, backed by English capital, has obtained a tract of land on the Albany Turnpike, about three miles from this city, and will commence work at once on the erection of its first plant in the United States. The factory will be given over to the manufacture of hardwood veneers, which are required extensively for manufacturing bobbins for use in cotton and woolen mills and also for interior finishes of houses and for fine furniture. Gun stocks and tool handles are to be made here also.

CHROME, N. J.—A factory is to be erected by the Armour Packing Co. on a tract of land which has been acquired between Chrome and Port Reading. The plant will cost about $100,000 and will be used as a lard refinery.

LANDINGVILLE, PA.—The Landing Knitting Co., of Landingville, has been organized with the following officers: A. D. Warmkessel, Pres.; A. W. Fritz, Vice-Pres.; H. W. Fehr, Secy., and C. W. Warmkessel, Treas. A 2-story brick factory will be built, the contract for the erection having been awarded to IRVIN H. BECKER, of Schuylkill Haven, Pa.

WILKES-BARRE, PA.—The Wilkes-Barre Lace Co. will construct a $500,000 addition to its plant, if the city will consent to closing Court St. According to the Wilkes-Barre "Leader," the addition will afford room for about 40 machines. Following are the officers of the company: Pres., J. W. Hollenback, of this city; Vice-Pres., Fred Goodfrey, Scranton; Secy., H. A. Dunning, and Treas., Clarence Whitman, of New York.

BALTIMORE, MD.—William I. Dunkel has had plans prepared for a 1-story factory to be erected at the northeast corner of Ostend St. and Peach Alley. GEORGE C. NELSON is the builder.

McAndrews & Forbes are planning to have a 3-story mill building built for the J. S. Young branch at 2731 Boston St., to cost $10,000. The DAVID M. ANDREW CO., 26th St. and Mt. Vernon Ave., has the contract.

WINSTON-SALEM, N. C.—The P. H. Hanes Knitting Co., of Winston-Salem, N. C., has awarded contracts for its yarn mill. There will be about $250,000 expended and this will comprise the mill, mill village, waterworks, electric lighting equipment, etc. Contract for the buildings has been awarded to the FOGLE BROS. CO., of Winston-Salem, N. C. The main building will be one story high, of slow-burning construction (brick), 477 ft. long by 135 ft. wide. The cotton warehouse will be composed of three compartments separated by a fire wall, each compartment being 50 × 100 ft. There will be 36 cottages for operatives, a 200,000-gallon reservoir for water supply, 50,000-gallon tank for fire pumps, automatic sprinkler system for fire protection at mill and warehouse, etc. Contract for the 10,000 spindles to be installed has been awarded to the HOWARD & BULLOUGH AMERICAN MACHINE CO., of Pawtucket, R. I. O. A. Robbins of Charlotte, N. C., is the Hanes Co.'s Arch.-Engr.-in-Charge. This plant will spin the yarns consumed by the Hanes Knitting plant. Noted May 19.

GREENWOOD, S. C.—Articles of incorporation have been issued to the Panola Cotton Mills of Greenwood, S. C., the capital stock being $300,000. The officers have been elected as follows: Pres. and Treas., F. S. Evans; Vice-Pres., G. H. Taylor; Secy., W. R. Cothran. The details of buildings, machinery, etc., will be announced soon.

RAGLAND, ALA.—W. L. Brown, of Ragland, Ala., is planning to organize a $250,000 cotton mill company to build in this town or to induce cotton manufacturers to build a plant of that cost.

MORRISTOWN, TENN.—C. H. Bacon, of Loudon, Tenn., and his associates in the proposed Morristown, Tenn., plant, noted on May 19, have applied for the incorporation of the Hamblen Hosiery Mills, with a capital stock of $50,000. Arrangements are now being made to complete organization and decide on building and machinery details. Mr. Bacon will probably be elected Secy.-Treas. and Gen. Mgr.

COLUMBUS, OHIO.—O. M. BLOSE has been awarded the contract for the construction of the glove factory at 19th and Main Sts. for the National Glove Co.

AKRON, OHIO.—The GEORGE W. CARMICHAEL CO. has been awarded the contract for the construction of a $500,000 plant for the Firestone Tire & Rubber Co. The plant is to be of reinforced concrete construction and will consist of a number of different structures.

SWEETSERS, IND.—It is reported that the Sweetsers Grain Co. will build a grain elevator. G. C. Baum is Pres.

ELKHART, IND.—The C. G. Conn Mfg. Co. will ask for bids for the construction of a musical instrument factory on the site of the plant recently destroyed by fire, as soon as plans can be made. The new plant will cost $300,000.

COLEMAN, MICH. — Vanesste Bros., of Coleman, Mich., are having plans prepared for a new brick chickory plant, consisting of a main building, two stories, 35 × 45 ft.; a 2-story store room, 35 × 75 ft., and engine room, 35 × 65 ft. The buildings and equipment will cost about $20,000.

WYANDOTTE, MICH.—SCHEIBEL & STODDARD, of Wyandotte, Mich., were awarded the contract on May 20 for the main factory building for the Campbell-Kingsley Mfg. Co., of Wyandotte, Mich. The contract price is $18,000. The building will be 2-story, 60 × 170 ft., of Sibley brick and cement construction.

GRAND RAPIDS, MICH.—William Powell, of Grand Rapids, Mich., is contemplating a 2-story concrete factory building, 53 × 160 ft., and will build early this Summer. The plant is to cost $22,000.

DETROIT, MICH.—We are officially advised that Burrowes & Wells, Trussed Concrete Bldg., Detroit, have let the contract for the proposed 2-story factory building, 131 × 200 ft., for the American Lubricator Co., to the A. A. ALBRECHT CO., Penobscot Bldg. William M. Levyn is Secy., 93 Catharine St. Paving and stock brick, Bedford stone, mill construction, composition roof, structural iron, wood and concrete floors and electrical fixtures will be used in construction. Cost, $35,000.

Mildner & Eisen, Hammond Bldg., Detroit, are taking figures on a 5-story brew house, 70 × 112 ft.; a 2-story bottling works, 80 × 112 ft., a 1-story boiler house, 50 × 70 ft., and a 3-story stable, for the Tivoli Brewing Co., Louis M. Schimmel, Mgr., 155-67 Mack Ave. The buildings are to be brick, fireproof construction and composition. Cost, $350,000.

Pollmar & Ropes, Cleland Bldg., Detroit, are taking figures on a 3-story and basement candy factory, 40 × 100 ft., for Fred. Rosenberger, 387-9 Gratiot Ave. Press and stock brick, Bedford stone, composition roof, galvanized iron skylight and cornice, structural iron, hardwood finish and floors and electric fixtures will be used in construction. Cost, $18,000.

Baxer & O'Dell, Hammond Bldg., Detroit, have let the following contracts for the proposed 2 and 3-story buildings for the Brush Runabout Auto Co., Fred A. Harris, Secy., 12-14 Baltimore Ave., 152 × 128, 152 × 132 and 152 × 33 ft.: Masonry to GEORGE D. NUTT, Penobscot Bldg.; carpentry to NEHLS & WINTER, 845 Baldwin Ave.; iron and steel work to WHITEHEAD & KALES, Beecher Ave. and M. C. R. R.

The same architects let the following contracts on May 24 for the proposed plant for the Brisco Mfg. Co., John A. Boyle, Mgr., 1443 Woodward Ave.: Masonry to H. CAREW, 210 Joseph Campau Ave.; carpentry to DETLOFF BROS., 16 Sylvester Ave.; composition roofing to J. D. CANDLER, 176 High St.; iron and steel work to the RUSSELL WHEEL & FOUNDRY CO., Joseph Campau and M. C. R. R.

The Michigan Central R. R. Co., R. H. La Hommedieu, Gen. Mgr., foot of Third St., Detroit, has let the general contract for a 1 and 2-story warehouse to W. H. MILLER & CO., Hammond Bldg. Cost, $40,000.

George D. Mason, 80 Griswold St., Detroit, has let the general contract for the proposed carriage factory for the Anderson Carriage Co., 687 Woodward Ave., to E. P. DECKER & CO., Bank Chambers. Cost, $300,000.

The Detroit Gear Machine Co. let the general contract on May 23 for the proposed 2-story factory building, 120 × 58 ft., to DE-LISLE & CULBERTSON, Penobscot Bldg. Cost, $15,000.

DETROIT, MICH.—Albert Kahn and E. Wilby, Archs., Trussed Concrete Bldg., Detroit, let the following contracts on May 18 for the Anderson Forge Co., William R. Anderson, Mgr., 21 St. Aubin Ave., for the $1,000,000 forge plant to be erected at Jefferson Ave. and Connor Creek: Iron and steel work to H. B. LEWIS, 45 Joseph Campau Ave.; plumbing to WILLIAM GOURLEY, JR., 635 Fort St., East.

The same architects have let the following contracts for the Grabowsky Power Wagon Co., Max H. Grabowsky, Mgr., 68-72 Champlain St., for the proposed new automobile factory. Plumbing to ERNST BROS., 414 Woodward Ave.; roofing to J. D. CANDLER, 179 High St. Plant is to cost $30,000.

RACINE, WIS.—The Wisconsin Corliss Engine Co. will build a $18,000 pattern shop and carpenter shop. They will have one story and will be 160 × 144 and 48 × 120 ft., of reinforced concrete. Kirchhoff & Rose, Majestic Bldg., Milwaukee, Archs.

MILWAUKEE, WIS.—The H. G. Razall Co., blank book manufacturer, has purchased a factory site on the river between Linwood Ave. and Folsom Pl., and will erect a factory building. The building will cost $50,000.

H. C. Hengels, Arch., 702 Grand Ave., is preparing plans for a $60,000 factory building to be erected by the Waltham Piano Co. at Keefe Ave. and First St. It will have three stories and solid brick walls.

E. R. Liebert, Arch., 445 Milwaukee Ave., is preparing plans for rebuilding the tannery building of Albert Trostel & Sons, recently destroyed by fire. He is also preparing plans for the erection of a reinforced concrete addition to be built to the plant, 130 × 200 ft.

MADISON, WIS.—The Gisholt Mfg. Co. will expend $350,000 for erecting new buildings and installing additional equipment for its plant.

TEXAS CITY, TEX.—H. B. Moore, of the Texas City Transportation Co., confirms the report that the Texas Sugar Refining Co., of Delaware, will erect a sugar refinery here. It is announced that the plant will cover twelve acres and will have a daily capacity of 600 tons of sugar.

WICHITA FALLS, TEX.—The U. S. Packing Co. has taken preliminary steps to establish a meat packing house here, at a cost of about $300,000.

CORPUS CHRISTI, TEX.—J. E. Young, of San Antonio, Tex., is arranging to establish a pickling and preserving factory here.

HARLINGEN, TEX.—The Great Western Sugar Refining Co. will erect a sugar mill near Harlingen. It recently acquired a tract of 9,600 acres of land which it will plant in sugar cane.

SAN BERNARDINO, CAL.—Plans for the railroad shops to be erected here by the Atchison, Topeka & Santa Fe Ry. Co. have been completed by the engineering office of the company. Bids for same are being taken. A building 120 × 510 ft. will be erected, steel frame, with filler walls of brick or concrete.

LOS ANGELES, CAL.—R. B. Young & Son, Archs., Lankershim Bldg., are preparing plans for a 4-story warehouse and factory building, to be erected for the Stockwell, Haley Co., on Alameda St.

SAN DIEGO, CAL.—The Pacific Coast Cider Co. will build a factory and will install modern equipment. W. G. Peterhaus is Pres.

WELLAND, ONT.—The H. B. Peters Co., of Dover, N. J., manufacturers of overalls and kindred garments, has secured a site, and a 3-story brick factory, 98 × 38 ft., will be built. About 25 hands will be employed at the start, to be increased to 200.

OWEN SOUND, ONT.—A syndicate of English capitalists will construct a $1,000,000 shipbuilding and repair plant and two drydocks at Owen Sound. An agreement has lately been signed with the town by Edward Box, their representative. The plant will be built on the C. P. R. water front there, and that company is taking a block of stock in the concern. The company proposes to build in Owen Sound two drydocks, a graving dock 650 ft. long and a floating dry dock capable of handling steamers up to 300 ft. in length, and in addition to put in a shipbuilding repairing plant.

HAMILTON, ONT.—The National Fire Proofing Co., Fulton Bldg., Pittsburg, Pa., will built a plant in Hamilton, Ont., and has interested Canadian capital in the enterprise. The new company will be known as the National Fire Proofing Co., of Canada, Ltd., with a capital of $1,000,000. The stockholders of the Pittsburg company, of which W. D. Henry is Pres., will share in the profits of the Canadian concern. Negotiations have been closed for the purchase of 125 acres of clay deposits and ground will be broken immediately for the construction. The works will employ nearly 200 men and will be ready for operation in January. The material manufactured will be terracotta hollow tile, used to fireproof buildings of every character, fireproof conduits and similar products. The property acquired is on the line of the Grand Trunk and Canadian Pacific railroads.

PORT COLBORNE, ONT.—DAVID DICK & SONS, LTD., of Welland, Ont., have secured the contract for building a cork factory here. Cost, $40,000.

MERIDA, MEXICO.—Enrique and Augusto Camera will erect a plant for the manufacture of alcohol from the residue of henequin upon their plantation near Merida. Paul Baud, Engr., will have charge of the construction of the plant.

MEXICO CITY, MEXICO.—Lewis W. Van Horne has made application to the Federal Government for a concession to erect a factory here for the manufacture of breakfast foods. He states that he will expend not less than $500,000 gold in the enterprise.

MISCELLANEOUS CONTRACTS.

**(denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news concerning canal and irrigation projects, etc., will be found under Water Supply—Irrigation.

DRYDOCKS.—Owen Sound, Ont.—See item under Manufacturing Plants.

DITCH.—Wheatfield, Ind.—Contract has been let by the County Sureyor for the Rompka-Sipkema ditch in Keener Township to H. W. MARBLE and R. E. HALLECK, at $5,147.

GASOLINE.—New York, N. Y.—Bids will be received until 3 p. m., June 16, by the Department of Parks for furnishing and delivering 30 bbls. of gasoline for parks Boro. Bronx.

BULKHEAD.—Ocean Park, Cal.—J. G. BRAUN has been awarded the contract to construct a cement bulkhead four blocks long, for the city on the short line beach, at $18,750.

FERRY.—San Francisco, Cal.—The Atchison, Topeka & Santa Fe Ry. Co. has awarded contract to the UNION IRON WORKS CO., San Francisco, for a ferry boat to cost about $400,000.

CEMENT.—Fort Leavenworth, Kan.—Bids will be received until June 10 by Maj. Thos. H. Slavens, Const. Q. M., U. S. Military Prison, Ft. Leavenworth, for furnishing 10,000 bbls. of Portland cement.

CEMENT.—New York, N. Y.—Bids will be received until noon, June 14 (readvertisement from May 31) by George Cromwell, Pres. Boro. Richmond, for furnishing and delivering 300 bbls. of Portland cement.

DITCH.—Caribou, Minn.—Bids will be received until June 20 by C. J. Hemmingson, at Hallock, for constructing County Ditch No. 18 at Caribou. Estimated cost, $13,072. J. E. Dishington, Engr., Warren, Minn.

WHARF.—St. Charles de Caplan, Que.—BURNS & CHARLESON, of Ottawa, have been awarded the contract for a new whaft at St. Charles de Caplan, Bonaventure County, Quebec. The cost is estimated at $15,000.

EARTHWORK.—New Orleans, La.—Bids will be received by Maj. H. Burgess, Corps Engrs., U. S. A., New Orleans, until 11 a. m., June 27, for constructing about 350,000 cu. yds. of earthwork in the Lower Tensas Levee District.

WIRELESS STATION.—Seattle, Wash.—The North American Wireless Corporation has awarded contract to the W. W. PERRY CO., Seattle, for constructing at West Seattle, a high-power wireless telegraph and telephone station.

TRINITROTOLUOL.—Fort Totten, N. Y.—Bids for furnishing and delivering 331,400 lbs. military trinitrotoluol will be received here until noon, July 25. Information furnished upon application to Disbursing Officer, torpedo depot.

STONE.—New Orleans, La.—Bids will be received until 11 a. m., June 13 by Lieut.-Col. Lansing H. Beach, Corps Engrs., U. S. A., New Orleans, for furnishing and delivering stone at South Pass and Southwest Pass, Mississippi River.

DITCH.—Donaldson, Minn.—Bids will b received until June 20, by C. J. Hemmin at Hallock, for constructing County D No. 19, at Donaldson, about 86,137 cu. Estimated cost, $15,964. O. L. Ham Engr., Crookston, Minn.

HULL.—Wheeling, W. Va.—Bids will be ceived until 11 a. m., June 22, by Capt W. Alstaetter, Corps Engrs., U. S. A., building a quarter-boat, No. 28, and a for snag-boat, Captain Turtle, for the K awha River improvement.

METAL SHELVING.—Washington, D. Bids will be received until 3 p. m., J 21, by James Knox Taylor, Supervis. Ar Treasury Dept., for metal shelving for office of the Supervising Architect, Tr ury Department, Washington.

*METAL SHELVING.—San Francisco, —Bids will be received by James Knox T lor, Supervis. Arch., Treasury Dept., Wa ington, D. C., until 3 p. m., July 14, metal vault shelving for the United Sta Custom House, San Francisco.

REPAIRING STEAMBOAT.—New York, Y.—Bids will be received until 2.30 p. m., Ju 16, by the Department of Public Chariti for furnishing all the labor and materi required for making alterations and repa to the steamboat "Thomas M. Mulry."

DITCH.—Fairmont, Ill.—Bids will be ceived until June 9, by Commissioners Union Drainage District No. 1 for construc ing a dredge ditch two miles long, requirin 50,822 cu. yds. of excavation and 7,930 of tile work. G. W. Chenvront, Comr.

WHARF.—New Orleans, La.—Bids will received until June 14 by the Board Por Commissioners, for constructing the Wm. Kernaghan wharf, the lumber and pilin for which will be furnished by said boar A. C. Bell, Engr., 606 Hibernia Bank Bldg.

PIER WORK. — Pentwater, Mich.—Bid were received on June 3 by Maj. C. S. Riche Corps Engrs., U. S. A., Grand Rapids, Mich for repair of piers at Pentwater. Contrac was let to the MUSKEGON DOCK & DREDGING CO., Muskegon, Mich., at $8,593.

SCALES.—New York, N. Y.—Bids will be received until 2 p. m., June 13, by the President, Boro. Manhattan, for furnishing and delivering nine platform scales, furnishing, delivering and installing two automatic hopper scales and one overhead track scale, for the various public baths, Boro. Manhattan.

DRAINAGE DITCHES.—Santa Ana, Cal.—Contract for the construction of 15 miles of drainage ditches (100,000 cu. yds.), near Santa Ana (bids received on May 21), has been let to PETER WALKER, Los Angeles, at $17,000. Max Robbins is Secy., and S. H. Finley, Engr., Delhi Drainage District, Santa Ana.

DITCH.—Des Moines, Iowa.—Bids will be received until noon, June 20, by Board County Supervisors for the excavation and construction of drainage ditch located in Drainage District No. 11 in Elkhart Township. About 53,471 cu. yds. of earth are to be excavated and removed. H. B. Frase, County Audr.

ROCK.—New Orleans, La.—Bids were received on May 25 by Maj. H. Burgess, Corps Engrs., U. S. A., 3338 St. Charles Ave., New Orleans, for furnishing about 50,000 tons of rock for Kempe and Giles Bends. Contract has been awarded to RICHARD M. MURPHY, New Orleans, at $1.93 per ton, delivery on U. S. barges at Vicksburg, Miss.

HEADSTONES.—Boston, Mass.—Bids will be received until 11 a. m., June 15, by Depot Q. M., 263 Summer St., Boston, for furnishing the quartermaster's department, U. S. Army, 20,000 white marble headstones, conforming to existing standard and specifications. Quantity specified subject to increase or decrease of not to exceed 50%.

PIERS.—New Orleans, La.—Bids will be received until 7.30 p. m., June 14, by the Board Commissioners of the Port of New Orleans, Hibernia Bank Bldg., for the construction of reinforced concrete foundation piers for the Branch M. King Shed, Eighth Harmony Shed No. 2, Sixth St. Shed, Third St. Shed and the Soraparu St. Shed. A. C. Bell, Engr.

*DITCHES.—Greenwood, Miss.—Bids will be received until noon, June 20, by G. W. Holmes, Pres. of the Lake Henry Drainage District, Leflore County, Miss., who will let contract for eleven miles of open ditches to be dug with steam dredge, or other suitable appliance. Requires the excavation of 200,000 cu. yds. of dirt approximately; payments monthly, 80%.

FIRE HOSE.—New York, N. Y.—Bids will be received until 10.30 a. m., June 16, by the Fire Department for furnishing and delivering 30,000 ft. of 2½-in. rubber fire hose in Boros. Brooklyn and Queens, 20,000 ft. of 2½-in. rubber fire hose in Boros. Manhattan Bronx and Richmond, and 10,000 ft. of 3-in. rubber fire hose in Boros. Manhattan, Bronx and Richmond.

STEAMER.—Memphis, Tenn.—The Lee Line will soon begin construction of a new steel hull and framework steamboat here to cost $125,000. It will resemble the Reese Lee (the old U. S. Brown) and will be built for memphis and St. Louis trade. The new boat probably will be named "Bob Lee, Jr.," in honor of the son of Captain Robert E. Lee, general manager of the line.

MINERAL OIL.—Cincinnati, Ohio.—Bids will be received until noon, June 25, by the Light-House Inspector, Cincinnati, for furnishing 20,000 gals. of water-white mineral oil of 150 degrees fire test during the fiscal year ending June 30, 1911. Said oil to be delivered in good, sound barrels of about 50 gals. each from time to time as called for by the light house inspector.

LEVEE.—Middletown, Ohio.—Bids were received on May 24 by the County Commissioners for the construction of the Stout levee from the Trenton bridge on the east side of the Miami River to Middletown. The estimated cost was $26,930. The bids received were: W. D. Winchell, Columbus, $29,208; IRWIN BROS., Hamilton, Ohio, $25,477 (awarded contract). Noted on May 5.

DREDGING.—Buffalo, N. Y.—Bids were received on May 20 by the Department of Public Works for dredging Buffalo River, Peck Slip and City Slip, about 100,000 cu. yds. Bids were received (price given per cu. yd.) as follows: Buffalo Dredging Co., Buffalo, 26.5 cts.; Great Lakes Dredge & Dock Co., Cleveland, Ohio, 29.9 cts.; Empire Engineering Corporation, Buffalo, 39.5 cts.

LEVEE.—Jacksonville, Ill.—Bids were received on June 2 by Charles W. Brown, Engr., Scott Block, Jacksonville, for approximately 100,000 cu. yds. of levee work and 74,000 cu. yds. of ditch work in the Meredosia Lake Drainage and Levee Dist. in the western part of Morgan and Cass Counties, Ill. Contract was awarded to J. M. O'MEARA & SON, Cullom, Ill., at $22,774.

DRAIN.—Rockwell, Iowa.—Bids were received on May 23 by C. O. Dixon, County Audr., for the construction of Joint Drain No. 70, in Webster County, and No. 95, in Calhoun County. Estimated quantity, 623,079 cu. yds. G. P. Smith, Fort Dodge, Iowa, is Engr. in charge of construction. Contract was awarded to N. C. McGINNIS, Bement, Ill., at 6.11 cts. per cu. yd. on main drain and 7 cts. on branches Nos. 4 and 9.

DITCH.—Danville, Ill.—Bids were received on May 23 by the Commissioners of Union Drainage District No. 2, towns of Oakwood and Pilot, at the office of Swallow & Swallow, Attorneys, Danville, for constructing a ditch requiring 18,989 ft. of from 8 to 27-in. standard tile f. o. b. Brothers Station, constructing six head walls, etc. Contract has been awarded to the NATIONAL DRAIN TILE CO., of Terre Haute, Ind., at $8,950.

TILE DRAIN.—Deland, Ill.—Bids will be received by J. B. Rinehart, Clk. Drainage Bd. Comrs., Drainage District No. 4, Town of Goose Creek, at Deland, until June 17, for the following work: Furnishing, hauling and laying 16,600 ft. of 27 to 12-in. tile; all tile above 16 ins. in diameter to be salt glazed, vitrified, first-class drain tile; all tile, 16-in. and smaller to be red shale tile, first-class quality. W. J. Day, Engr., Bement, Ill.

PARK.—Watertown, Wis.—Bids were received on May 28 by the Board of Park Commissioners for constructing a park in the Sixth Ward. The work consists of grading and sloping about 4,000 cu. yds. surfacing, planting trees, constructing a gravel walk, dredging canal (about 4,400 cu. yds.), erecting a bridge, span 26 ft. 8 ft. wide, etc. Arnold Kraeft is City Engr. Contract was awarded to J. L. TRODING, Oconomowoc, Wis., at $3,350.

DREDGING.—Wilmington, Del.—Bids were received on May 24, by Maj. R. R. Raymond, Corps Engrs., U. S. A., for dredging Mispillion and Appoquinamink Rivers. (Noted on March 24.) Bids were as follows: River & Harbor Improvement Co., Philadelphia, 22 cts. per cu. yd. for work in the Mispillion River and 14 cts. for work in the Appoquinamink River; Rickards Dredging Co., Philadelphia, 15 cts. for Mispillion and 12.8 cts. for Appoquinamink.

COFFERDAM.—Wheeling, W. Va.—In constructing part of navigable pass and of weirs for Dam No. 26, Ohio River, the United States will build cofferdam near middle of river, leaving available channel of about 310 ft. between cofferdam and lock wall and about 320 ft. between cofferdam and abutment. Blueprints of cofferdam may be seen in engineer offices at Pittsburg, Wheeling, Cincinnati and Louisville. Capt. F. W. Alstaetter, Corps Engrs., U. S. A., Wheeling.

PAINTS, OILS, ETC.—New York, N. Y.—Bids will be received by Maj. M. G. Zalinski, Q. M., U. S. A., Whitehall St., New York, until June 13, under schedule No. 93, for furnishing 500 gals. biturine solution, 500 gals. drier, 5,000 gals. marine engine oil, 1,000 lbs. red lead, 5,000 lbs. white lead, 2,500 lbs. white zinc, 5,000 lbs. white lead in oil, 1,000 lbs. white zinc in oil, 3,450 lbs. miscellaneous paints, 30 gals. shellac, 1,000 gals. turpentine, 150 gals. varnish and 750 gals. miscellaneous paint.

DREDGING, ETG. — Boston, Mass.—Bids were received on June 3 by the Board of Harbor and Land Commissioners, State House, Boston, for improving Menamsha Inlet in Gay Head and Chilmark, requiring (A) about 25,000 cu. yds. of dredging sand to deepen the channel, and (B) furnishing and placing 1,500 tons of granite quarry grout and chips to strengthen the jetties and protect the banks of the channel. Frank W. Hodgson is Ch. Engr. Contract was awarded to the EASTERN DREDGING CO., Boston, as follows: (A) $5,690; (B) $2.15 per ton.

*SHEDS.—New Orleans, La.—Bids were received on May 20, by the Board of Commissioners of the Port of New Orleans, for the fabrication and erection of the structural steel and cast iron for any or all of several sheds. Contracts were awarded as follows: The McCLINTIC-MARSHALL CONSTRUCTION CO., of Pittsburg, Pa., for four of the sheds, as follows: Branch M. King Shed, $33,697; eighth Harmony Shed No. 2, $28,820; Third St. Shed, $30,791, and Soraparu St. Shed, $33,726. The NOELKE-RICHARDS IRON WORKS, of Indianapolis, Ind., for the Sixth St. Shed, at $13,091. A. C. Bell, Engr., 606 Hibernia Bank & Trust Co. Bldg., New Orleans.

STEEL FUEL OIL TANKS.—Washington, D. C.—Bids were received as follows on June 4, by the Bureau of Yards and Docks, Navy Department, Washington, for the construction of six fuel oil tanks and six gasoline storage tanks, one of each to be erected at Bradford, R. I.; Norfolk, Va.; Charleston, S. C.; Key West, Fla.; Guantanamo, Cuba; and San Juan, P. R., respectively:

Sharon Boiler Works, Sharon, Pa., (1) $83,280, (2) $81,958. Cruse Kemper & Co., Ambler, Pa., (1) $68,235, (2) $67,435. Oil City Boiler Works, 39 Cortlandt St., New York, (1) $88,087, (2) $86,482. G. & W. Mfg. Co. 26 Cortlandt St., New York, (1) $67,743, (2) $67,413. Petroleum Iron Works Co., Sharon, Pa., (1) $62,500, (2) $61,000. Kerr, Murray Mfg. Co., Fort Wayne, Ind., (1) $85,436, (2) $83,670. Manning, Maxwell & Moore, Inc., 85 Liberty St., New York, (1) $97,000, (2) $97,000.

CONTRACT PRICES.

(denotes that this work is advertised in Engineering News.)*

PAVING.—Seattle, Wash.—Bids were received May 20 for improving Federal Ave. and other streets from: (A) Independent Asphalt Paving Co., Third Ave. and Cherry St., Seattle, Wash.; (B) F. McLELLAN, Burke Bldg., Seattle, Wash. (awarded contract); (C) Barber Asphalt Paving Co., White Bldg., Seattle, Wash.; (D) P. J. McHugh, Seattle, Wash. The itemized bids were as follows:

PAVING AND STREET IMPROVEMENTS, SEATTLE, WASH.

		A	B	C	D
	Abstract of title—fixed estimate	$6,000.00	$6,000.00	$6,000.00	$6,000.00
	Clear and grub., lump sum	500.00	3,000.00	5,500.00	1,000.00
26,000	cu. yds. sub-grading	.35	.31	.45	.50
23,324	lin. ft. curb, straight concrete	.33	.33	.30	.30
7,883,	lin. ft. curb, armored concrete	.58	.60	.60	.60
5,100	lin. ft. curb, curved concrete	.58	.65	.65	.65
38,172	sq. yds. paving, asphalt	1.60	1.60	1.60	1.70
11,874	sq. yds. paving, brick	2.70	2.50	2.55	2.80
1,222	sq. yds. paving, brick block	2.70	2.50	2.70	2.85
4,960	sq. yds. paving, sandstone block	3.50	3.50	3.45	3.60
4,960	sq. yds. paving, granite block alt.	3.75	3.70	3.90	3.85
679	sq. yds. gutter, brick	2.70	2.50	3.00	2.80
101	sq. yds. alley crossings, concrete	1.40	1.20	1.30	1.25
21	sq. yds. alley crossings, brick	2.70	2.50	3.00	2.80
1,164	sq. yds. concrete walks	1.08	1.00	1.00	1.00
200	sq. yds. concrete walks, repairing	1.20	1.10	1.15	1.25
448	lin. ft. wooden stops	.35	.40	.40	.40
20	catch basins, 1 inlet	55.00	50.00	65.00	60.00
5	catch basins, 2 inlets	60.00	65.00	75.00	70.00
2	catch basins, 1 inlet, moved	15.00	23.00	30.00	25.00
2	single inlets	12.00	15.00	12.50	15.00
33	inlets moved	3.00	5.00	5.00	3.00
20	inlets adjusted	3.00	3.00	5.00	3.00
7	curb inlets	8.00	7.00	8.00	12.00
81	adjusting catch basins and manhole covers	2.00	3.00	3.00	2.00
36	monument cases	8.00	8.00	7.00	8.00
5	brick gate chambers, standard	30.00	40.00	30.00	35.00
4	brick gate chambers, large	40.00	48.00	40.00	45.00
790	cu. yds. concrete for retaining wall	8.00	7.00	8.50	9.00
5	M. ft. wood bulkhead lumber	25.00	20.00	25.00	25.00
1,000	lbs. bulkhead iron	.06	.05	.18	.09
13	hydrants	80.00	85.00	75.00	80.00
60	lin. ft. 6-in. c.-i. pipe	1.00	1.10	1.50	1.40
4	hydrants reset	25.00	20.00	25.00	25.00
500	lin. ft. hydrant extensions	.10	.06	.10	.07
500	lin. ft. galvanized pipe, ¾-in.	.40	.35	.50	.40
1,300	lbs. special castings	.05	.06	.10	.07
200	lbs. shackle rods	.06	.06	.20	.09
10	cu. yds. extra excavation	.80	.50	1.00	5.00
2	cu. yds. concrete	12.00	7.00	10.00	7.50
476	lin ft. pipe sewer, 8-in.	1.40	1.50	1.50	1.10
30	ft. 7 × 10-in. box sewer	1.00	.70	3.00	.75
2	manholes, 3½ ft.	55.00	60.00	60.00	45.00
4,060	lin. ft. 6-in. side sewer connections	.90	1.00	1.15	1.00
220	lin. ft. 3-in. sewer pipe	.20	.25	.20	.15
400	lin. ft. 3-in. tile drain	.15	.10	.20	.15
2	sand boxes	20.00	30.00	35.00	25.00
5	cu. yds. rock pockets	3.00	1.00	3.00	2.00
	Totals:				
	Sandstone	$158,689	$158,217	$166,163	$169,370
	Granite	$159,929	$159,209	$168,395	$170,610

NEWTON, MASS.—Bids were received May 25 by the Metropolitan Water and Sewerage Board, 1 Ashburton Pl., Boston, for laying 8,830 ft. of 60-in. c.-i. water pipe in Newton. Dexter Brackett is Ch. Engr. The bidders were: (A) James H. Fannon, Somerville, Mass; (B) CAVANAGH BROS., Boston, Mass. (awarded contract); (C) Bruno & Petitti, Boston, Mass.; (D) Merrill-Ruckgaber Co., New York, N. Y.; (E) Coleman Bros., Boston, Mass.; (F) Luke D. Mullen, Boston, Mass.; (G) Joseph Hanreddy, Chicago, Ill.; (H) The Henry Spinach Contracting Co., Waterbury, Conn.; (I) John J. Falvey, Somerville, Mass.

WATER MAINS, NEWTON, MASS.

		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
8,830	lin. ft., laying 60-in. c.-i. pipe	$3.25	$3.82	$3.95	$3.92	$4.00	$4.25	$4.32	$4.58	$4.59
140	lin. ft., laying 12 and 16-in. c.-i. pipe for blow-offs.	1.00	1.25	1.00	.65	2.00	2.50	1.50	.80	2.00
100	cu. yds. rock excavation above grade	5.00	8.00	3.00	6.50	6.00	5.00	5.00	5.00	4.50
5	cu. yds. rock excavation below grade	5.00	8.00	3.00	7.00	8.00	5.50	6.00	10.00	5.00
50	cu. yds. earth excavation below grade	1.00	2.00	1.50	.75	1.50	1.00	1.50	5.00	1.50
6	chambers for air valves	50.00	50.00	35.00	35.00	100.00	60.00	50.00	50.00	25.00
5	chambers for blow-off and by-pass valves	50.00	60.00	45.00	60.00	100.00	60.00	90.00	50.00	60.00
2	chambers for 36-in. valves	100.00	60.00	75.00	75.00	50.00	80.00	100.00	45.00	100.00
70	cu. yds. concrete masonry	10.00	7.00	7.00	10.00	7.00	9.00	9.00	7.50	8.00
	Totals	$30,862	$36,056	$36,484	$36,787	$38,005	$39,905	$40,541	$42,518	$42,570

SEWERS.—Brusb Colo.—Bids were received May 23 by the city for the construction of a sanitary sewer. C. H. Meeker is Engr., McCrook, Neb. The bidders were: (A) P. O'Brien & Son, Denver, Colo.; (B) Inter-Mountain Bridge & Construction Co., Tecumseh, Neb.; (C) Thos. McGovern, Denver, Colo.; (D) Seevie Brothers, Denver, Colo.; (E) Dillon, Stone Co., Denver, Colo.; (F) Vickery & Foster, Denver, Colo.; (G) C. WALKER & SON, North Platte, Neb. (awarded contract); (H) George E. Cox, Ft. Morgan, Colo. The itemized bids were as follows:

SANITARY SEWERS, BRUSH, COLORADO.

		A	B	C	D	E	F	G	H
	District No. 1:								
2,500	lin. ft. 8-in. pipe	$0.58	$0.61	$0.79	$0.67	$0.66	$0.68	$0.60	$0.66
4,100	lin. ft. 10-in. pipe	.67	.73	.84	.77	.79	.75	.70	.80
1,300	lin. ft 12-in. pipe	.80	.86	1.00	.87	.89	.87	.85	.90
17,000	lin. ft. 15-in. pipe	1.00	1.06	1.27	1.07	1.11	.95	1.00	1.20
	Outlet complete	475.00	650.00	500.00	500.00	550.00	375.00	275.00	500.00
55	manholes, 650 vertical feet	4.60	5.20	4.08	4.50	5.00	4.00	3.75	4.50
	District No. 2:								
16,700	lin. ft. 8-in pipe	.58	.64	.69	.67	.66	.68	.60	.66
50	manholes, 500 vertical feet	4.60	5.20	4.70	4.50	5.00	4.00	3.75	4.50
8	flush tanks	95.00	75.00	80.00	85.00	75.00	75.00	85.00	80.00
1,500	lin. ft. ½ service pipe	.30	.21	.20	.27	.25	.25	.25	.25
	Totals, District No. 1	$25,702	$27,686	$31,49[illegible]	$26,772	$28,716	$24,992	$25,796	$29,925
	Totals, District No. 2	$13,196	$14,112	$14,813	$13,727	$14,497	$14,331	$12,945	$14,287
	Grand totals	$38,898	$41,798	$46,307	$40,499	$43,213	$39,323	$38,741	$44,212

U. S. POSSESSIONS.

(denotes that this work is advertised in Engineering News.)*

LUMBER.—Panama.—Bids were received as follows on May 24, by the Isthmian Canal Commission, Washington, for furnishing about 3,224,463 ft. B. M. of long-leaf yellow pine timber for car repairs: Bay Shore Lumber Co., Mobile, Ala., $85,066, $87,823; G. Elias & Bro., Buffalo, N. Y., $94,689; William D. Gill & Sons, Baltimore, $103,257; D. L. Gillespie & Co., Pittsburg, $79,950; J. K. Joice, 164 Dearborn St., Chicago, $103,212; Robinson Lumber Veneer & Box Co., New Orleans, $88,752; Chicago Lumber & Coal Co., St. Louis, $89,034; Georgia Pine Co., Baltimore, $92,515; Gress Mfg. Co., New York, $86,099; A. S. Bacon & Sons, 2 Bay St., West, Savannah, Ga., $106,216.

CASTINGS.—Panama.—Bids were received as follows on June 1, by the Isthmian Canal Commission, Washington, for furnishing the estimated supply of malleable iron castings for the dump cars and steam shovels used in the excavation work on the Isthmus during the period ending June 30, 1911: Fort Pitt Malleable Iron Co., Allegheny, Pa., $26,989, 3.85 cts. per lb.; $27,923, 4 cts. J. P. Pennell, 45 Broadway, New York, $30,364; 4.35 cts.; $31,411, 4.5 cts.; $31,062, 4.45 cts. Ross Meehan Foundry Co., Chattanooga, Tenn., $25,131; $25,382. Troy Malleable Iron Co., Troy, N. Y., $31,413; $32,413. American Malleables Co., Washington, $21,814; $22,687.

ICE AND REFRIGERATING PLANT.—Philippines.—Bids will be received by Maj. M. Gray Zalinski, Depot Q. M., Army Bldg., New York, until 2 p. m., June 20, for furnishing and delivering at factory or f. a. s. steamer, New York or San Francisco, ice and refrigerating plant for Corregidor Island, P. I.

SUPPLIES.—Panama.—Bids will be received by Capt. F. C. Boggs, Corps Engrs., U. S. A., Washington, D. C., until 10.30 a. m., June 20, for lumber, manganese shells for revolving screens for rock crushing plant, steel castings, fire box steel, crucibles and hose couplings, Circular No. 587.

CASTINGS.—Panama.—Bids will be received until June 23 by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for steel castings and repair parts for steam shovels, Circular No. 586.

BUILDINGS, ETC.—Hawaii.—Bids will be received by Col. F. L. Denny, Q. M., U. S. Marine Corps, Washington, D. C., until 11 a. m., Aug 25, for the erection of a marine barracks, officers' houses and servants' quarters at the naval station, Pearl Harbor, T. H. Proposal blanks, plans, specifications and other information can be obtained from the commanding officer, marine barracks, naval station, Honolulu, H. T.; the commanding officer, marine barracks, navy yard, Bremerton, Wash.; the depot quartermaster, U. S. Marine Corps, 182 Second St., San Francisco, Cal., or Quartermaster, Marine Corps, Washington.

*TELEPHONE LINES.—Porto Rico.—Bids were received on May 18 by John A. Wilson, Comr. of the Interior for Porto Rico, San Juan, P. R., for furnishing all material and constructing three telephone lines complete; one from Guayama to the Patillas dam site, a distance of about nine miles; one from Juana Diaz, via Villalba, to Toro Negro Tunnel, about twelve miles; and one from Guayama to Carite Tunnel, about ten miles. The estimated cost is about $150 per mile. Contract was awarded to FRANK L. COLE & CO., Sucs, Mayaguez, P. R., at $5,642 for the three lines, involving an aggregate length of 21 miles, at $182 per mile, supplying copper-clad wire. B. M. Hall is Ch. Engr., P. R., Irrigation Service.

EXAMINATIONS.

ENGINEERS, ETC.—Albany, N. Y.—Open competitive examinations for the State, county and village service will be held in various cities throughout the State on June 25, for the positions mentioned below. These examinations cover positions in the classified service in the State departments and institutions, the various classified county departments and institutions, and the villages so far as they are classified. Appointments to positions in the county and village service will be made when practicable from the general eligible lists, residents of the county or village being preferred for such appointments. Applications must be filed before noon, June 18. No application will be accepted unless properly executed and filed with the State Civil Service Commission, Albany, N. Y., in time to arrange for the examination. Competitors must be at least 21 years of age, and must be citizens and residents of New York State, unless otherwise noted below. Non-residents or non-citizens when admitted, are (except in special cases) subject to the provisions of Civil Service Regulation X, that in case the eligible list contains the names of three or more citizens residents of New York State, they shall be preferred in certification over non-residents and non-citizens.

List of positions and requirements: Chainman. Minimum age 18 years; $2.50 to $3 a day. Civil Engineer, for the supervision of elimination of grade crossings, Public Service Commission, Second District, $2,000 to $2,400. This work will probably last from one to three years and is located in Westchester County. It requires some knowledge of accounts, as well as a familiarity with track work, masonry construction, concrete, bridges, etc. Chemist Department of Agriculture, $900 to $1,200. Engineering Draftsman, $4 to $5 a day. Foreman (Lumber Inspector), Auburn Prison, $3.50 a day. Highway Inspector, State and County Service, $3.50 to $4.50 a day. Open to residents of all counties except Kings, New York, Queens and Richmond. Rodman, $3.50 to $4 a day. Minimum age 20 years. Superintendent of Streets, $1,200. Open only to male residents of the village of Saratoga Springs. Technical Assistant, Department of Agriculture, $800 to $1,200.

INDUSTRIAL NOTES.

THE CENTRAL ENGINEERING & Construction Co., 75 Monroe St., Chicago, has recently absorbed the engineering firm of Grossmann & Proshauer, located in Old Colony Bldg., that city.

AN INDUSTRIAL EXPOSITION will be held in Detroit from June 20 to July 6. The primary object of the exhibit is to display, to advantage, the natural resources of the city and to show the manufactured products.

THE ILLINOIS STEEL CO., Chicago, has purchased from the Crocker-Wheeler Co., Ampere, N. J., two 3,530-K.V.A., 25-cycle, 3-phase, 2,300-volt A. C. turbo generators. The excitation will be effected by two 35-KW., 125-volt. generators.

THE GARY MANUFACTURING CO. have closed a contract through their engineers, Messrs. Wehr, Walden & Dukehart, with the Ambursen Hydraulic Construction Co., 176 Federal St., Boston, for a dam 30 ft. high and 300 ft. long across the Patapsco River at Alberton, Maryland.

THE FEDERAL ENGINERING & CONSTRUCTION CO., Philadelphia, has recently been incorporated in Delaware with a capitalization of $50,000 to engage in engineering and construction work of all kinds. The incorporators are Hugh T. Downing, Webster S. Haase, Harry T. Shelly, all of Philadelphia.

CONTEMPLATED BUILDINGS from plans filed during May, 1910, in 44 cities were, according to "The American Contractor," $61,804,000, compared with $75,494,000 in the same month last year. This decrease of nearly $13,000,000 or 17%, was al st entirely accounted for in the cities of w York, Chicago and Newark, N. J. The cific Coast cities send very unsatisfac y reports except Los Angeles.

THE DEMOLITION of the Grand Ce Station, New York City, the terminals of N. Y. C. & H. R. R. R. and the N. Y., H. & H. R. R., began at midnight June The building was erected in 1871, but re struction of the terminal has been in pr res for years in spite of the fact that th is only a shell of the original building there has been no interruption to the traf which amounts to sixty thousand passeng conveyed by 400 trains a day.

THE COVINGTON MACHINE CO., throu its Eastern sales office, 50 Church St., N York City, announces recent orders as fo lows: A double punch and shear, weigh about 80,000 lbs., from the Chesapeake Ohio R. R. Co. for the Huntington shop two machines for the Baldwin Locomot Works, Philadelphia; a heavy double pun and shear for the York Safe & Lock Co York, Pa.; a special multiple punch an angle shear was sold to the E. Van Noord Co., Boston, and 10 punches and shears different shops in New York, Buffalo an Pittsburg, as well as for export.

A SYNDICATE OF CONTRACTORS in New York City has made the statement th as soon as the Public Service Commissio advertises for bids it will be ready to bi on the new subways and start work immedi ately. The syndicate, known as the Bradley-Gaffney-Steers Co., is anxious to bid on the Tri-Borough system, which will involv the expenditure of about $130,000,000. In view of the fact that the city does not seem prepared to appropriate the entire amoun if contracts are let, it is possible that private capital will have an opportunity to bid Numerous changes have been made in th contract forms as a result of several public hearings.

AN INCREASE in the capitalization of the railways in the United Kingdom of £5,289,000 was made in 1909. In the reports for 1909 the authorized capital is £1,403,390,000 and the paid-up capital £1,313,950,000. The length of lines open for traffic was 23,264 miles.

The number of ordinary passengers fell from 1,278,115,488 to 1,264,857,000, the number of third-class passengers showing a reduction of over eight millions, but season ticket holders increased from 721,801 to 729,000.

The quantity of minerals and general merchandise increased from 491,595,056 tons to 499,322,000 tons. The number of miles traveled by trains fell from 423,200,145 miles to 419,499,000. The gross receipts from passenger traffic were £51,198,000 (a falling off of £460,000), from goods traffic, £59,464,000, as compared with £58,888,347, and from steamboats and miscellaneous £9,507,000, the total gross receipts amounting to £120,169,000, an increase of £274,673. Working expenditure amounted to £75,033,000, as against £76,407,801. The net receipts were £45,136,000, as compared with £43,486,526.

AN INTERESTING EXHIBITION of engineering equipment and supplies was held in connection with the Second Annual Convention of the Engineers' Society of Pennsylvania, June 1, 2 and 3 at Harrisburg. The display was given in the reinforced-concrete car barn of the Central Pennsylvania Traction Co., a short distance from the center of the city and this building proved exceptionally desirable for the purpose of the exhibition. About 90 concerns participated, representing most of the best-known companies in the engineering field. The Pennsylvania R. R. Co. sent one of its new electric locomotives designed for use in the Hudson Tunnels between Newark and its new terminal at 33d St., New York City, which was exhibited in the company's yards. This attracted a great deal of attention from engineers as well as laymen.

A list of the exhibitors follows: Wm. Cramp & Sons Shop & Engineering Co., U. S. Metal & Mfg. Co., Engineering News, A. Pomerantz & Co., Henry Disston & Sons, John A. Roebling's Sons Co., Clement Restein Co., Parkesburg Iron Co., Westinghouse Machine Co., Westinghouse Elec. & Mfg. Co., Goldschmidt Thermit Co., The Pennsylvania Steel Co., The Q. & C. Co., James Boyd & Co., Elliott-Fisher Co., Harrison Safety Boiler Co., Harrison Foundry & Machine Co., Vandyck Churchill Co., Hbg. Pipe & Pipe Bending Co., W. & L. E. Gurley, J. G. Brill & Co., Hbg. Cycle & Typewriter Co., W. K. Mitchell & Co., Alliance Machine Co., Cleveland Pneumatic Tool Co., Green Fuel Economizer Co., The Norton Co., The Van Dorn & Dutton Co., The Rail Joint Co., Bausch & Lomb Optical Co., Homestead Valve Co., Pratt & Whitney Co., Cleveland Twist Drill Co., Crane Co., Hunter & Dickson, Electric Controller & Mfg. Co., Henry, Millard & Henry, Carbolineum Wood Pres. Co., H. Belfield Co., Keystone Chemical & Mfg. Co., Ingersoll-Rand Co., The Penna. State College, Pacific Flush Tank Co., The Garlock Packing Co., American Pulley Co., American Iron & Steel Mfg. Co., Merritt & Co., J. H. Jolley & Co., Detroit Graphite Co., Standard Roller Bearing Co., Edison Portland Cement Co., The Standard Tool Co., McGraw Publishing Co., Celfor Tool Co., The Call Automatic Switch Co., National Lead Co., Otis Elevator Co., Shepard Electric Crane & Hoist Co., Standard Scale & Supply Co., Semet-Solvay Co., Simplex Valve & Meter Co., Joseph Dixon Crucible Co., Yale & Towne Mfg. Co., Keystone Lubricating Co., Holophane Co., Ford & Kendig, Nelson Valve Co., Henry Gilbert & Son, W. H. Wynn & Co., Burroughs Adding Machine Co., American Cement Co., George Oldham & Son Co., Nachod Signal Co., Eugene Dietzen Co., Link Belt Co., Dauphin Electrical Supplies Co., H. C. Roberts Elec. Supply Co., Universal Portland Cement Co., Williams, Brown & Earle, Sloan, Howell & Co., Allis-Chalmers Co., Wm. C. Robinson & Son Co., York Engineering Co., Western Electric Co., Robert Ross Jones & Bro., Strong Machinery & Supply Co., Electro Clock Co.,

LIST OF CONTRACTS PENDING.

Light, Heat and Power Plants.

		Noted in issue of
6- 9	Wiring, Fort Caswell, N. C.	6- 9
6-10	Heating plant, Omaha, Neb.	5-26
6-11	Substation, Charleston, S. C.	5-12
6-11	Piping, etc., Charleston, S. C.	5- 5
6-11	Remodeling elec. light system, Ft. Snelling, Minn	6- 2
6-13	Elec. and power plant, Sturgis, Mich.	6- 9
6-14	Heating plant, Wahpeton, N. Dak.	5-26
6-15	Lighting fixtures, Washington, D. C	6- 2
6-15	Elec. light plant, Tyndall, S. Dak.	6- 9
6-15	Elec. light system, San Francisco, Cal	6- 9
6-16	Power-house addition, Athens, Ohio	6- 2
6-17*	Hydroelectric plant, etc., Idaho Falls, Idaho	5-26
6-17*	Street lighting, Washington, D. C.	6- 9
6-17	Franchise, Fulton, N. Y.	6- 9
6-21	Power plant, Monticello, Iowa	6- 2
6-22	Lighting fixtures, Washington, D C	6- 2
6-24	Ventilating, Carrington, N. Dak.	6- 9
6-27*	Conduit, etc., St. Louis, Mo	6- 2
6-29*	Power plant, Cleveland, Ohio	6- 2
6-30*	Boiler, Baltimore, Md	6- 2
6-30	Power plant, Cisco, Utah	5-19
7- 6	Franchise, Bodie, Cal	6- 9

Bridges.

6- 9	Bridge, Madison, Ga	6- 9
6-11	Bridge, Larkspur, Colo	6- 2
6-11	Bridge, Granite, Colo	6- 2
6-13	Abutment, Delaware, Ohio	6- 2
6-13*	Substructure, etc., Fort Smith, Ark.	5-26
6-13	Bridge, Scottsburg, Ind.	6- 9
6-13	Bridge, Tilton, N. H	6- 9
6-14	Bridge, Lima, Ohio	6- 2
6-15	Bridges, Minneapolis, Kan	6- 2
6-15	Bridge, Alta Vista, Iowa	6- 9
6-15	Bridges, Pittsburg, Pa	6- 9
6-16	Arches, etc., New Castle, Ind.	6- 9
6-16	Bridges, Sussex, Va	6- 9
6-16	Bridge work, Reading, Pa	6- 9
6-16	Bridge work, New York	6- 2
6-17	Superstructure, Cincinnati, Ohio.	5-26
6-17	Bridges, Elyria, Ohio	6- 9
6-20	Bridge, Greenfield, Ind	5-19
6-20	Bridges, Cedartown, Ga	6- 2
6-21*	Bridge work, St. Louis, Mo	5-19
6-22	Bridge work, Cleveland, Ohio	5-26
6-22	Bridges, Tulsa, Okla	6- 9
6-23	Bridge, Reading, Pa	6- 9
6-24	Bridge, Taylor's Falls, Minn	6- 9
6-25	Bridges, Cleveland, Ohio	6- 9
6-25	Bridge, San Antonio, Tex	6- 2
6-27	Bridge, Niles, Ohio	6- 9
6-27	Bridge, Hubbard, Ohio	6- 9
6-27	Piers, Pittsburg, Pa	6- 9
6-28*	Bridge, Winnipeg, Man	5- 5
7- 5	Bridge, Stevenson, Wash	5-12
7- 6	Bridges, Metz, Cal.	5-26
7- 6	Bridge, Templeton, Cal	6- 9
7- 6	Bridges, Council Grove, Kan	6- 9
7- 9*	Bridge, Huron, Ohio	6- 9
7-25	Bridges, Leesburg, Va.	5-26

Buildings.

6- 9	Quarters, etc., Ft. Leavenworth, Kan	6- 2
6- 9*	Post-office, Middletown, N. Y.	5- 5
6- 9*	Plumbing, Madison Barracks, N. Y.	5-12
6- 9	Quarters, Plattsburg, N. Y.	5-19
6-10	Church, Indianapolis, Ind	6- 2
6-11	Storehouse, etc., Ft. Screven, Ga.	6- 2
6-11	Elevators, Omaha, Neb	5-19
6-11*	Stable, Madison Barracks, N. Y.	5-19
6-11	Nurses' quarters, New York	5-12
6-11	Dormitory, Northfield, Minn	6- 9
6-13	Schools, New York	6- 9
6-13	Boiler plant, Pittsburg, Pa	5- 5
6-13*	Bakery, Madison Barracks, N. Y. (Mfg. Pl.)	5-19
6-14	Post-office, Asbury Park, N. J.	5-12
6-14	Dept. building, Ottawa, Ont	5-26
6-14	Alterations, Ft. Adams, R. I.	6- 9
6-15	Alterations, etc. San Francisco, Cal.	5-12
6-15	Schools, Magnolia, Ark	5- 5
6-15*	Building, Cincinnati, Ohio	5-19
6-15	Guardhouse, Ft. Barrancas, Fla.	6- 2
6-16*	Plumbing, Charleston, S. C.	5-19
6-16*	Guardhouse, Ft. Strong, Mass.	5-19
6-17	Quarters, Ft. Gill, Okla	6- 9
6-19	Plans, Milwaukee, Wis	5-26
6-20*	Post-office, Columbus, Ind	5-19
6-20	School, Bloomingdale, Ind	6- 2
6-20	Boiler, Baltimore, Md	6- 9
6-20	Schools, New York	6- 9
6-20	Ice and refrigerating plant, Philippines	6- 9
6-23	Post-office, Clinton, Mo	5-26
6-24*	Post-office, Aiken, S. C.	5-24
6-25	Foundation, Boston, Mass	6- 2
6-27	Post-office, Minneapolis, Minn.	5-26
6-27	School, New York	6- 9
6-28*	Post-office, Plattsmouth, Neb.	5-26
6-29	Post-office, Chambersburg, Pa.	6- 2
6-30*	Post-office, Greenville, Ill.	5-26
7- 1	Plans, New Orleans, La	3-17
7- 1	Post-office, Jeffersonville, Ind.	6- 2
7- 5*	Post-office, Troy, Ala	6- 9
7- 7	Postoffice, Beloit, Wis	6- 9
7-11*	Post-office, Columbus, Neb	6- 2
7-12	Quarters, San Francisco, Cal.	6- 9
7-18*	Post-office, Demopolis, Ala	6- 9
9-10	Plans, Albany, N. Y.	6- 9
8-25	Buildings, etc., Hawaii	6- 9
11- 1	Plans, Toronto, Ont	6- 9

Water-Works.

		Noted in issue of
6-10	Water-works, Petersburg, Neb.	6- 2
6-10*	Reservoir, Tyrone, Pa	5-26
6-10	Reservoir, Fort Sill, Okla	5-19
6-11	Water-works extension, Macomb, Ill	6- 2
6-11	Air-compressor, Wauscon, Ohio.	6- 9
6-13	Water-works, Raymond, Minn.	6- 9
6-13	Water-wks., Cherry Valley, Mass.	6- 9
6-14	Cocks, Detroit, Mich	6- 9
6-14	Water main, Cleveland Heights, Ohio	5-19
6-14*	Pump station, Detroit, Mich.	4-21
6-14*	Water system, Harrison, N. Y.	5-26
6-14	Water-works, Huntsville, Mo.	5-26
6-14	Water main extensions, etc., North Chicago, Ill.	5-26
6-15	Filter, Clarksburg, W. Va	5-19
6-15*	Reservoir, Pittsburg, Pa	6- 2
6-15	Hydrants, New York	6- 2
6-15*	Intake extension, Hammond, Ind.	6- 9
6-15	C.-i. pipe, Gaffney, S. C	6- 9
6-15*	Water-pipe, Hyde Park, Vt.	6- 9
6-16	Water mains, Batesville, Ind	6- 2
6-17	Franchise, Long Beach, Cal	6- 2
6-18	Water-works, Coldwater, Ont.	6- 9
6-20	W.-Wks. franchise, Dayton, Ky.	5-26
6-20	Meters, New York	6- 9
6-21	Reservoir, Cheyenne, Wyo	6- 2
6-21	Filter plant, Atlanta, Ga	6- 2
6-21	Water-wks., Spencerport, N. Y.	6- 9
6-28*	Pumping station, Atlantic City, N. J	6- 9
6-30	Pipe, Fort Leavenworth, Kan.	6- 9
7- 1	Steel pipe, Los Angeles, Cal.	5-26
7- 8	Canal enlargement, Boise, Idaho.	5-19

Sewers.

6- 9	Sewer, New York	6- 9
6-10	Sewers, Buffalo, N. Y	6- 9
6-10*	Sewers, Louisville, Ky	5-26
6-11	Sewer, Rock Island, Ill	6- 9
6-13	Sewers, Creston, Iowa	6- 9
6-13	Sewers, Charles City, Iowa	6- 9
6-13	Sewer, Laporte, Ind	6- 9
6-14	Sewers, Hartington, Neb	6- 9
6-14	Sewer system, O'Neil, Neb	6- 9
6-14	Sewers, Cleveland Heights, Ohio.	6- 9
6-14	Sewer extensions, etc., East Rochester, N. Y.	6- 9
6-14	Drains, Waterbury, Conn	6- 9
6-14	Sewer, St. Louis, Mo	5-12
6-14	Sewers, Belton, Tex	5-26
6-15	Lateral sewer, Vancouver, Wash.	5-26
6-15	Sewer system, Columbia, Tenn.	6- 2
6-15	Sewers, Baltimore, Md	6- 9
6-15	Drain, Boston, Mass	6- 9
6-17	Sewers, Salt Lake City, Utah.	6- 9
6-17*	Drain tile, Deland, Ill.	6- 2
6-20*	Sewers, Washington, D. C	6- 9
6-20	Sewer system, Crete, Neb	6- 9
6-21	Sewers, South Bend, Ind	6- 9
6-21*	Sewer, St. Louis, Mo	5-19
6-22*	Sewerage extensions, etc., Freehold, N. J.	5-26
6-24	Sewer, South Bend, Ind	6- 9
6-24	Sewers, Lebanon, Ohio	6- 2
7- 1	Sewage plant, West View, Pa	6- 9

Streets and Roads.

		Noted in issue of
6-10	Roads, Cincinnati, Ohio	5-26
6-10	Road, Concord, N. H	6- 2
6-10	Paving, Monessen, Pa	6- 9
6-11	Paving, Dover, Del	6- 9
6-11	Macadam, Ashland, Ohio	6- 9
6-11	Macadam, Delaware, Ohio	6- 2
6-11	Road, Vincennes, Ind	5-19
6-12	Paving, Wapakoneta, Ohio	6- 9
6-13	Paving, Lawrence, Mass	6- 9
6-13	Gravel road, Mt. Holly, N. J.	6- 9
6-13	Paving, Wilkes-Barre, Pa	6- 9
6-13	Paving, etc., Natrona, Pa	6- 9
6-13	Paving, Norwalk, Ohio	6- 9
6-13	Paving, sidewalks, Creston, Ia.	6- 9
6-13*	Paving, Hastings, Neb	6- 2
6-13	Paving, Nowata, Okla	6- 9
6-13*	Road, Burlington, N. J	5-26
6-13	Grading, East Youngstown, Ohio.	6- 2
6-13*	Macadam, Pelham Manor, N. Y.	6- 9
6-13	Curb, Benwood, W. Va	6- 2
6-14	Paving, etc., St. Louis, Mo	6- 2
6-14	Sidewalks, Cleveland Heights, O.	6- 2
6-14	State roads, Hartford, Conn	6- 2
6-14	Paving, Norwalk, Conn	6- 9
6-14	Paving, New York	6- 9
6-14	Macadam, Hickory, N. C	6- 9
6-15	Paving, Baltimore, Md	6- 9
6-15	Paving, Athens, Ohio	6- 9
6-15	Road, Ft. Barrancas, Fla	5-26
6-15	Roads, Peru, Ind.	5-26
6-15*	Street impvt., Freehold, N. J.	5-26
6-15	Stone dust, New York	6- 2
6-16	Macadam, St. Clairsville, Ohio.	6- 9
6-16	Road, Peru, Ind	6- 9
6-16	Paving, Beloit, Wis	6- 9
6-16	Paving, Ft. Madison, Ia	6- 9
6-16	Sidewalks, East Hartford, Conn.	6- 9
6-16*	Paving, Waukegan, Ill	6- 9
6-17	Macadam, Cambridge, Ohio	6- 9
6-18	Macadam, Delaware, Ohio	6- 2
6-18	Roads, Cleveland, Ohio	6- 9
6-20*	Grading, Canton, Ohio	5-26
6-20*	Paving, Marshalltown, Ia	6- 2
6-20	Paving, Lake City, Fla	6- 9
6-20	Paving, Madison, Wis	6- 9
6-21	Road impvt., Lima, Ohio	6- 9
6-21	Road, Olympia, Wash	6- 9
6-21	Paving, South Bend, Ind	6- 9
6-21	Paving, Billings, Mont.	5-26
6-23	Paving, Carrollton, Ohio	5-26
6-22	Road, New Philadelphia, Ohio.	6- 9
6-23	Road, Springfield, Ohio	6- 9
6-24	Sidewalks, Valparaiso, Ind	6- 2
6-24	Roads, Pittsburg, Pa	6- 9
6-29	Roads, Columbus, Ohio	6- 9
6-30	Road, Greenfield, Ind	6- 9
6-30	Roads, Anderson, Ind	6- 9
6-30	Sidewalks, Brazil, Ind.	6- 2

Miscellaneous.

6- 9	Ditch, Fairmont, Ill	6- 9
6-10	Cement, Ft. Leavenworth, Kan.	6- 9
6-10	Ditch, Mitchell, S. Dak	6- 2
6-10*	Garbage disposal (Garbage), Toledo, Ohio.	5-26
6-10	Dredging, New Orleans, La	5-26
6-13	Fire engine, New York	6- 2
6-13	Stone, New Orleans, La	6- 9
6-13	Paints, oils, etc., New York	6- 9
6-13	Scales, New York	6- 9
6-14	Cement, New York	6- 9
6-14	Piers, New Orleans, La	6- 9
6-14	Wharf, New Orleans, La	6- 9
6-14*	Riprap, Wilmington, N. C	5-19
6-15*	Foundations, pier extensions, Wheeling, W. Va	5-19
6-15*	Drainage canals, Tallahassee, Fla.	5- 5
6-15*	Lock gates, Panama	4-21
6-15	Drain, Clarion, Iowa	5-12
6-15	Wharf extension, Ft. Barrancas, Fla.	5-26
6-15	Headstones, Boston, Mass	6- 9
6-15	Removal of ashes, etc. (Garbage) West Hoboken, N. J	6- 9
6-15	Garbage, Oakland, Cal	6- 9
6-16	Repairing steamboat, New York.	6- 9
6-16	Gasoline, New York	6- 9
6-16	Fire hose, New York, N. Y.	6- 9
6-17	Tile drain, Deland, Ill	6- 9
6-17*	Dredging equipment, Philadelphia, Pa.	4-28
6-17	Wharf, Angers, Que	6- 2
6-18	Levee, Memphis, Tenn	6- 2
6-18	Refuse kiln (Garbage), Boston, Mass.	5-26
6-18	Seawall, Newport, R. I	5-26
6-20	Wharf extension, Sault Ste. Marie, Ont.	5-26
6-20	Harbor impvts., Michigan City, Ind	6- 2
6-20	Wire, rope, etc., Vicksburg, Miss.	6- 2
6-20*	Steel furniture, etc., Louisville, Ky	6- 2
6-20	Ditch, Des Moines, Iowa	6- 9
6-20	Ditch, Donaldson, Minn.	6- 9
6-20	Ditch, Caribou, Minn	6- 9
6-20*	Ditches, Greenwood, Miss	6- 9
6-20	Supplies, Panama	6- 9
6-21	Metal shelving, Washington, D. C.	6- 9
6-22	Hull, Wheeling, W. Va	6- 9
6-23*	Breakwater, Newport, R. I	5-26
6-23	Castings, etc., Panama	6- 9
6-24*	Towboat, New Orleans, La	6- 2
6-25	Mineral oil, Cincinnati, Ohio	6- 9
6-27	Earthwork, New Orleans, La	6- 9
6-27*	Dredging, New York	6- 2
6-27*	Steel lock gates, etc., Buffalo, N. Y.	5-26
6-27*	Ladder dredge, Panama	5- 5
6-29*	Bulkhead, etc., New York, N. Y.	5-26
6-30	Seawall, San Francisco, Cal	6- 2
7-14*	Metal shelving, San Francisco	6- 9
7-25	Trinitrotoluol, Ft. Totten, N. Y.	6- 9
7-25*	Dams and canal, Porto Rico	5-12

Examinations.

6-14	Inspector Water-Pipe Laying, Boston, Mass.	5-26
6-15	Surveyor, Philippines	5-12
6-15	Geologist, Washington, D. C.	5-19
6-25	Rodman, Albany, N. Y	6- 9
6-25	Supt. of Streets, Albany, N. Y.	6- 9
6-25	Technical Asst., Albany, N. Y.	6- 9
6-25	Engrg. Draftsman, Albany, N. Y.	6- 9
6-25	Foreman, Albany, N. Y	6- 9
6-25	Highway Inspector, Albany, N. Y.	6- 9
6-25	Chainman, Albany, N. Y	6- 9
6-25	Civil Engr., Albany, N. Y	6- 9
6-25	Chemist, Albany, N. Y	6- 9
7- 8	Electrician, New York, N. Y.	6- 2
7-13	Junior Engineer, Wash., D. C.	6- 2
7-13	Asst. Engr., Wash., D. C	6- 2
7-13	Examiner, Klamath Falls, Ore.	5-12

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at the office of The Engineering News Publishing Co., 220 Broadway, New York.

6-10*	Garbage disposal, Toledo, O.	(S.)	5-26
6-10*	Reservoir, Tyrone, Pa.	(P. & S.)	5-26
6-10*	Sewers, Louisville, Ky	(S.)	5-26
6-11	Substation, Charleston, S. C.	(S.)	5-12
6-11	Nurses' quarters, New York	(S.)	5-12
6-13*	Substructure, etc., Fort Smith, Ark.	(P. & S.)	5-26
6-14	Water main extensions, North Chicago, Ill.	(S.)	5-26
6-14	Heating plant, Wahpeton, N. Dak.	(P. & S.)	5-26
6-15*	Drainage canals, Tallahassee, Fla.	(P. & S.)	5- 5
6-15*	Foundations, pier extensions, Wheeling, W. Va.	(S.)	5-19
6-15*	Reservoir, Pittsburg, Pa.	(P. & S.)	6- 2
6-18	Refuse kiln, Boston, Mass.	(S.)	5-26
6-18	Seawall, Newport, R. I.	(S.)	5-26
6-21*	Bridge work, St. Louis, Mo.	(P. & S.)	5-19
6-25	Foundation, Boston Mass.	(S.)	6- 2
6-27*	Steel lock gates, etc., Buffalo, N. Y.	(S.)	5-26
6-28*	Bridge, Winnipeg, Man.	(P. & S.)	5- 5
7- 8	Canal enlargement, Boise, Iowa,	(P. & S.)	5-19

Penna. **Trojan Powder Co., Pressed Steel Car Co., American Car & Foundry Co., Hyatt Roller Bearing Co., The Electric Service Supply Co., The Pay-Within Car Co., New York Safety Chest Co., H. B. McNeal, Pennsylvania Railroad Co., Independent Pneumatic Tool Co., Michigan Lubricator Co., General Electric Co.**

A DECREASE in the number of idle freight cars amounting to 9.7% was shown in the latest bulletin of the American Railway Association. This is the first reduction reported since Feb. 16. On May 25 the net surplus of cars on the lines of the United States and Canada stood at 110,661, a decrease of 11,432 over a fortnight before. The number idle was 115,390, compared with 127,148. The shortage increased from 4,555 to 4,729. Coal car figures showed improvement, the surplus falling from 46,062 to 29,888. Box car surplus increased from 44,996 to 48,326.

In sections, where two weeks ago the number of idle cars had reached top figures, there was a marked turn for the better. Particularly in the middle Atlantic states and the Northwest did freight traffic exhibit increased activity. Cars in the former section decreased over 15%. The Northwestern territory, reported a 50% decrease in box cars and a 40% decrease in coal cars, bringing the total number of idle cars to 10,908, the lowest since March. Lines operating in the middle West experienced similar gains in freight traffic, where coal cars decreased 50%. Reports from the far West showed a like betterment in freight offerings. New England contributed to the general decrease by a substantial reduction in available cars. Following is a table showing the net surpluses at various dates.

	Net Surplus.
May 19	110,661
May 5	122,593
April 27	96,319
April 13	77,357
March 30	25,886
March 16	17,342
March 2	15,408
Feb. 16	14,309
Jan. 5	38,417
Dec. 8, 1909	38,877
Nov. 10, 1909	*3,286
Oct. 13	12,544
May 26, 1909	272,470

*Net shortage.

TRADE PUBLICATIONS.

NUT LOCK.—United Nut Lock Co., Springfield, Mass. Paper; 3½ × 6 ins.; pp. 12; illustrated.

The nut lock made by this company is characterized by the euphonious name of "Hugtite." From the description this nut lock is made of malleable iron with tongues projecting from inner circumference in such a manner as to engage the thread of the bolt. These tongues are adapted to the pitch of the thread to be engaged. The rim is thick enough to afford ample wrench surface. These nuts are made in regular sizes from ¼-in. to 1½ ins.

CONCRETE FENCE POSTS.—W. W. Bailey, Chadwick, Ill. Paper; 3½ × 6¼ ins.; pp. 6; illustrated.

These posts are reinforced by flat steel strips (perforated), and have embedded in them forked sockets which spread the sides of the ordinary staple and thus give it a grip. The posts are made in cast-iron molds.

CONCRETE FENCE POSTS.—Miracle Pressed Stone Co., Minneapolis, Minn. Paper; circular; 9½ × 12½ ins.; illustrated.

The Victor post is circular, reinforced by strips of expanded sheet steel. Holes are cored for the insertion of staples. It is cast in vertical machines, the molds being shaken to consolidate the concrete.

CONCRETE FENCE POSTS.—Nebraska Concrete Co., 200 Barker Block, Omaha, Neb. Paper; 6¼ × 5¼ ins.; pp. 6; illustrated.

The Owens post is of rectanglar section, and its steel reinforcement consists of a tube and four truss wires, the wires being attached to the ends of the tube and passed over spreaders. The posts are said to be in use by the Union Pacific Ry.

CONCRETE FENCE POSTS.—H. S. Quick & Co., 300 W. 64th St., Chicago. Paper; 5¼ × 8¼ ins.; pp. 24; illustrated.

The Monarch post is rectangular, reinforced with perforated steel strips and having socket fasteners or wire loops for the fence wires. It has been used for railway fences, whistle posts, etc. The pamphlet includes descriptions (with prices) of the Monarch and Rock-Island fence fasteners, Monarch steel reinforcement and National automatic post-making machine.

CONCRETE POSTS.—The D. & A. Post Mold Co., Three Rivers, Mich. Paper; 6 × 9 ins.; pp. 20; illustrated.

These posts are made in steel multiple molds, thus reducing the time and cost of manufacture. They are of U-section, with steel reinforcing strips, and the fence wires are secured by wire loops passed around the post and twisted round the fence wire. The molds and manufacture are described and there is a partial list of users of the post-making machines.

CONCRETE POSTS.—The Luck Cement Post Co., Aurora, Ill. Paper; 6 × 6¾ ins.; pp. 20; illustrated.

The Luck post is of octagonal section, with steel reinforcement, and having holes for staples to hold the fence wires. Particulars are given as to the molds for line and corner posts, methods of making the concrete, etc.

CONCRETE FENCE POSTS.—Illinois Gravel Co., Princeton, Ill. Paper; 7 × 5 ins.; pp. 12; illustrated.

The Scott posts are of semi-circular or U-section, tapering in form, and having the face scored with grooves to receive fence wires of any desired spacing. The fastening is a spiral wire looped around the posted and twisted around each fence wire.

CONCRETE POSTS.—Ohio Post Mold Co., Toledo, Ohio. Paper; 5 × 6¾ ins.; pp. 24; illustrated.

These posts are of T-section, reinforced with steel rods, and having the flat face grooved to receive the fence wires. The grooves are close together, allowing for any desired spacing, and the fence wires are secured by tie wires around the post. Special brace and corner posts are made, and the line posts may be made in single or multiple molds.

CONCRETE FENCE POSTS.—Haas Post Machine Co., York, Neb. Paper; 6 × 3¾ ins.; pp. 20; illustrated.

The post is of rectanglar section and is reinforced by four wires with anchor nuts. Hooks or wire loops to receive the fence wires may be embedded in the concrete, and a loop on the top serves for the attachment of the top wire generally used to prevent animals from leaning upon the fence. The fence wires may be secured also by the wires passed around the post.

BOILERS.—Marine Boiler Works Co., Toledo, Ohio. 1910 Catalog. Paper; 9 × 6 ins.; pp. 38; illustrated.

Photographs of large Scotch marine boilers, with corrugated furnaces, under construction in the boiler works, are reproduced in this catalog. Some of the illustrations show 150, 200 and 300-HP. internally-fired boilers in operation. There is also a sectional elevation of an internally-fired boiler with corrugated furnace.

Some space is given to vertical tube and horizontal return tubular boilers and to horizontal water-tube boilers. Line drawings and half-tones of "Toledo" square-box boilers are shown. These resemble locomotive boilers and are intended for dredges, steam shovels, etc.

WIRE ROPE.—The Trenton Iron Co., Trenton, N. J. Paper; 3½ × 6 ins.; pp. 48; illustrated.

Although this is a catalog giving the sizes of breaking strengths and prices of the various wire rope manufactured by this concern, there is likewise a great deal of information of a semi-technical character referring to the different kinds of rope, the proper way to use it and information regarding the installation of aerial tramways. The company also makes a patent locked-wire cable especially adapted for fixed lines serving as tracks for carriages to traverse in aerial systems of cable-hoist conveyors. These cables are made of flattened wires so as to give a smooth exterior surface. In the catalog are likewise illustrated clamps, stirrups and sheaves.

HIGH-PRESSURE STREET FLUSHING MACHINE.—Studebaker Bros. Mfg. Co., South Bend, Ind. Four-page folder, 9 × 12 ins.; illustrated.

A centrifugal pump, direct-connected to a gasoline engine, is used in this street-washing machine to maintain a uniform pressure on the distributing pipe ranging at will from 5 to 32 lbs. It appears that the tank mounted on the wagon is filled in the ordinary way, and merely serves as a source of supply for the pump. This makes possible the maintenance of the desired pressure until the last gallon of water is used. The engine and pump are located at the rear of the tank and beneath the level of the tank bottom. The distributing pipe is between the rear and front wheels and is equipped with nozzles which may be so adjusted as to give "practically any angle" desired to the direction of the nozzle stream. The nozzles are opened and closed from the driver's seat by means of a lever.

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REINFORCED CONCRETE ARCH BRIDGE.

Bridgeport, Conn.

Sealed proposals will be received by M. A. Kenny, Director of Public Works, Room 16, City Hall, Bridgeport, Conn., until 4 o'clock P. M., Friday, June 17, 1910, for the construction of a reinforced concrete arch bridge, seventy-seven (77) foot span, requiring about twenty-five hundred (2500) cubic yards of concrete on Boston Avenue, Bridgeport, Conn.

Each bid must be accompanied by a certified check for one thousand ($1,000) dollars, made payable to the Treasurer of the City of Bridgeport.

The right to reject any or all bids is reserved by the Director of Public Works.

Plans and specifications and other information can be obtained at the office of the City Engineer, City Hall, Bridgeport, Conn.

DEPARTMENT OF PUBLIC WORKS,
M. A. KENNY,
Director.

June 7, 1910.

WAR DEPARTMENT, Office of Constructing Quartermaster, U. S. A., 263 Summer St., Boston, Mass., June 8, 1910.—Sealed proposals in triplicate, will be received in this office until 10 o'clock A. M., July 7, 1910, and then opened, for changes and extension of sewer system at Fort Warren, Boston Harbor, Mass. Plans can be seen, and blank forms, specifications, and full information furnished upon application at this office. Deposit of $5.00 required as guarantee for safe return of plans. Plans can also be seen at the office of the Chief Quartermaster, Dept. of the East, Governor's Island, N. Y. H. The United States reserves the right to reject any or all bids. Envelopes should be endorsed "Proposals for extension of sewer, Fort Warren, Mass.," and addressed to CAPTAIN A. M. MILLER, Constructing Quartermaster, U. S. A., Boston, Mass.

VINE STREET EXTENSION ROAD.

Canton, Ohio, June 6, 1910.

Sealed proposals will be received at the Office of the Commissioners of Stark County, Ohio, until 10 o'clock A. M., July 6th, 1910, for draining, grading and paving with brick one mile of road in Lexington Township in said County, under the provisions of the laws of Ohio.

Specifications, plans and profiles on file in the Office of the County Commissioners of Canton, Ohio, and copies of said specifications may be obtained at said office. Certified check for $500.00 must accompany bid and be made payable to Stark County Commissioners.

The County Commissioners reserve the right to reject any and all bids, or parts of bids. Blank proposals will be furnished.

J. H. McCONNELL,
Auditor of Stark County, Ohio.

PAVEMENT.

Watertown, N. Y.

Sealed proposals will be received by the Board of Public Works at the office of the City Engineer in the City Hall, Watertown, N. Y., until 8 P. M., June 17th, 1910, for the construction of about 6,000 sq. yds. of pavement in High Street, together with the necessary curbing, grading, culverts, sewers, catch basins, and all other work in connection therewith for the proper completion of the pavement. Bids will be received for each of the following kinds of pavement:

Vitrified block pavement on concrete base.
Bituminous Macadam Bitulithic pavement on concrete base.

Samples of materials to be used in the different kinds of pavement must be deposited with the City Engineer at or before the time of opening of the bids.

Plans and specifications may be seen at the office of the City Engineer from whom blank proposals can be obtained.

The Board of Public Works reserves the right to reject any or all bids received.

A certified check for five hundred dollars, payable to the order of the City Treasurer, Watertown, N. Y., must accompany each bid.

BOARD OF PUBLIC WORKS,
E. W. SAYLES,
City Engineer.

Watertown, N. Y., June 3, 1910.

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Inspector's Handbook of Reinforced Concrete

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WITH the strides made in the past few years in the reinforced concrete building construction, the demand for inspectors or clerks of the works having experience in this construction has been far greater than the supply. Those architects or engineers who have specialized in this construction have had applications from inspectors continually who wish to avail themselves of contact with this work under the direction of specialists. This small volume has been published with the hope that it would fill a place in the literature on reinforced concrete not covered by any other book. The authors' experience and personal contact with the inspectors and their viewpoint of various details of the work shows the necessity of such a book of instruction.

For the sake of simplicity in treating the subject of reinforced concrete, it is divided into three general divisions, each division embracing a study of one of the main elements that enter into the construction of reinforced concrete. These are, first, the "Forms or Falsework"; second, the "Reinforcement"; and, third, the "Concrete." The chapters follow in the order named, as it is the intention to follow throughout the book the process of construction of the actual work as nearly as can be. In addition, an appendix has been added, embracing formulas and tables to be used in calculating the strength of reinforced concrete.

CONTENTS

FORMS OR FALSEWORK—Box-shaped Forms—Knock-down Forms—Props or Shores—Steel Beam Girders—Column Forms—Cleaning—Wall Forms—Wall Bearings—Pipe Holes, Sleeves, etc.—Removal of Forms.

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